

PHASE 2 OF THE HOPE BAY PROJECT  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

## Appendix V5-3F

Doris North Project Aquatic Studies 2003



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# DORIS NORTH PROJECT AQUATIC STUDIES 2003

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**DORIS NORTH PROJECT  
AQUATIC STUDIES  
2003**

**- FINAL REPORT -**

Prepared for:

**Miramar Hope Bay Ltd.**  
North Vancouver, BC

Prepared by:

**RL&L Environmental Services Ltd./Golder Associates Ltd.**  
#300, 10525 – 170 St.  
Edmonton, AB  
T5P 4W2

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Suggested Citation: RL&L Environmental Services Ltd. / Golder Associates Ltd. 2003. Doris North Project aquatic studies 2003. Prepared for Miramar Hope Bay Ltd. RL&L/Golder Report No. 03-1370-007: 72 p. + 4 app.

## EXECUTIVE SUMMARY

Miramar Hope Bay Limited (MHBL) proposes to construct and operate a new underground gold mine (“Doris North Project”) in the West Kitikmeot Region of Nunavut. The project is located 685 km northeast of Yellowknife and 160 km southwest of Cambridge Bay. The mine is on Inuit owned land, approximately 5 km south of the Arctic Ocean. The nearest communities are Umingmaktok, located 65 km to the west and Bathurst Inlet located 110 km to the southwest.

The objective of the 2003 fisheries program was to address data gaps from the draft Environmental Impact Statement (EIS). The issues addressed in the 2003 field program included the use of the Roberts Lake system by Arctic char; fish use of near-shore areas in Doris, Roberts, and Little Roberts lakes, and Roberts Bay; water quality in selected lakes and streams in the study area; seasonal monitoring of discharge and water temperature in Doris, Roberts and Little Roberts outflows; and initial scoping of potential fish collection sites for the design of the Metal Mining Environmental Effects Monitoring (EEM) program.

### Bathymetry

Bathymetric surveys were conducted for Roberts Lake, Little Roberts Lake, and Roberts Bay in August and September 2003. Roberts Lake is one of the largest lakes in the study area, encompassing an area of 3.83 km<sup>2</sup> and a water volume of 51.6 million m<sup>3</sup>. This lake has a maximum recorded depth of 39.1 m, with a mean water depth of 13.5 m. Little Roberts Lake is one of the smallest lakes in the study area. This lake has an area of 0.10 km<sup>2</sup> and has a water volume of 0.18 million m<sup>3</sup>. Little Roberts Lake is shallow, with a mean depth of 1.7 m and a maximum recorded depth of 4.1 m. The majority of Little Roberts Lake likely freezes to the bottom. In Roberts Bay, detailed bathymetry was conducted in the west basin in the vicinity of the proposed jetty. This area surveyed was 0.77 km<sup>2</sup>. The maximum depth recorded in the surveyed area of Roberts Bay was 8.9 m and the mean depth was 3.3 m.

### Physical Environment

Hydrometric stations were installed on Roberts, Little Roberts, and Doris outflows from 30 June to 9 September. A data logger was programmed to record water pressure measurements on a 15-minute interval. At each station a permanent benchmark and a temporary staff gauge was installed. Stream discharge measurements were performed manually at least six times and these data, along with the logged measurements, were used to derive a stage-discharge rating curve for each station. Discharge measurements ranged from 0.41 m<sup>3</sup>/s (8 August) to 1.42 m<sup>3</sup>/s (30 June) in Doris Outflow, 0.31 m<sup>3</sup>/s (9 August) to 1.93 m<sup>3</sup>/s (30 June) in Roberts Outflow, and 0.90 m<sup>3</sup>/s (5 August) to 3.91 m<sup>3</sup>/s (30 June) in Little Roberts Outflow.

## **Physical Limnology and Water Quality**

The lakes sampled in 2003 were generally isothermal and uniformly mixed. Roberts Lake was the only lake that exhibited a brief period of thermal stratification. As a result of the wind-driven mixing, dissolved oxygen concentrations were suitable for supporting aquatic life. Reference Lake A was the only lake that had oxygen levels that were below the minimum Canadian Water Quality Guidelines (CWQG) criteria for early life stages of fish (9.5 mg/L), but this only occurred for depths of 4.5 and 5.0 m.

With the exception of the Tail Outflow, surface water quality in the streams sampled in 2003 was generally similar to the source lakes. Tail Outflow appears to be influenced by the local geology, as it had elevated levels of ions compared to those of Tail Lake. The unnamed tributary to Roberts Lake differed from other streams sampled during the study, with most water quality constituents being present in higher concentrations than the other streams sampled in 2003. Aluminum and copper concentrations in this tributary exceeded the CWQG criteria.

During the period of 28 July to 9 September 2003, stream water temperatures fluctuated between 8.1 and 13.9°C in Roberts, Little Roberts, and Doris outflows. Water temperatures were warmest at the end of July. Mean water temperature was highest in Doris Outflow (10.2°C) and slightly lower in Little Roberts Outflow (9.5°C) and Roberts Outflow (8.9°C).

## **Fish Communities**

In total, 5371 fish representing 14 species were captured in the Doris North Project area during fisheries surveys conducted in 2003. Fish sampling was conducted in three lakes, nine streams, and in the marine environment of Roberts Bay. The captured species included (in the order of abundance in the total catch) capelin (48.9%), saffron cod (31.9%), Arctic char (10.7%), ninespine stickleback (2.6%), lake trout (2.1%), Arctic flounder (2.1%), least cisco (0.5%), fourhorn sculpin (0.4%), cisco (0.3%), lake whitefish (0.2%), Pacific herring (0.1%), Greenland cod (0.1%), broad whitefish (0.04%), and longhead dab (0.02%).

### *Lake Communities*

Fish sampling was conducted in Doris, Roberts, and Little Roberts lakes mainly to capture small fish using near-shore habitat. Sampling methods included gill netting, fyke netting, beach seining, and backpack electrofishing. In total, 73 fish comprised of six species were captured. Five species were captured in Doris and Little Roberts lakes, whereas three species were captured in Roberts Lake.

Ninespine stickleback were the predominant species in each of the lakes sampled. Overall, ninespine stickleback was the dominant species (50.7%), followed by lake trout (17.8%), Arctic char (16.4%), lake whitefish (6.8%), least cisco (5.5%), and cisco (2.7%). Of the salmonid and coregonid species captured, juveniles comprised 59% of the catch. Despite the considerable fish sampling effort expended in each of the lakes, relatively few fish were captured.

### *Stream Communities*

Fish sampling was conducted in nine streams; these included Roberts, Little Roberts, Doris, Tail, Pelvic, Glenn, and Windy outflows, and inflows to Roberts Lake and Pelvic Lake. These streams (with the exception of Roberts Outflow) were sampled as part of the initial scoping of potential fish collection sites for the design of the Metal Mining Environmental Effects Monitoring (EEM) program. In total, 221 fish comprised of seven species were captured by backpack electrofishing. In three of the sampled streams (Pelvic Inflow, and Tail and Windy outflows), ninespine stickleback were the only species captured. Pelvic Outflow had the highest diversity of fish species, with a total of five. Of the streams sampled for EEM, ninespine stickleback was the dominant species encountered (43.4%), followed by Arctic char (27.6%), and lake trout (19.0%); other species captured included lake whitefish, least cisco, cisco, and fourhorn sculpin.

### *Arctic Char in Roberts Lake System*

A fish fence and trap and a fyke net were installed between 6 August and 8 September in Roberts Outflow to determine the number of Arctic char migrating from the ocean to Roberts Lake. In total, 543 fish representing six species were caught in Roberts Outflow. Arctic char was the predominant species in the overall catch (88.2%), followed by lake trout (7.9%).

The number of Arctic char entering the trap on a daily basis varied greatly. On most days, the number of fish generally did not exceed 18 fish, with the exception of two days (66 and 21 fish). The 2003 open-water period was a high flow year, and the majority of fish managed to pass through the boulder garden immediately below Roberts Lake that posed a fish passage problem in 2002. Most of the fish captured in Roberts Outflow (62% of the catch) were larger than 250 mm in fork length; these were primarily adults migrating from the marine environment into Roberts Lake. Arctic char smaller than 250 mm in fork length were juveniles likely undergoing localized movements between fresh water habitats (e.g., between Roberts and Little Roberts lakes).

### *Near-shore Fish Use in Roberts Bay*

Roberts Bay is the final receiving waterbody for lakes in the Doris North Project area and the location of a proposed jetty. Two sites were sampled with a fyke net to determine the fish species inhabiting the near-shore marine environments. In total, 4534 fish comprised of 11 species were captured during July and August 2003. Capelin was the predominant species in the overall catch (57.9%), followed by saffron cod (37.8%), and Arctic flounder (2.5%). It should be noted that capelin were only captured during a two day period at the end of July. Other species included Arctic char, fourhorn sculpin, lake trout, cisco, pacific herring, greenland cod, least cisco, and longhead dab.

Species diversity and composition differed between the two basins of Roberts Bay. In the west basin, 11 fish species were encountered, whereas in the east basin, seven fish species were encountered. Capelin and saffron cod were the dominant species in the west basin (69.1% and 28.5%, respectively), whereas in the east basin, capelin was not captured and saffron cod was by far the dominant species (86.2%).

Directional movement data from the fyke nets set in Roberts Bay indicated that similar numbers of saffron cod were captured in the east and the west bound nets throughout the sampling period; thus, these fish are likely utilizing the bay for rearing and feeding. Of the large numbers of capelin captured, all of these fish were captured in the east bound net. The timing of their capture coincided with the spawning season. It is likely that the capelin were not spawning in the bay near the fyke net set, but were migrating through the area.

Of the fish tagged in Roberts Bay, two were recaptured. One Arctic char (636 mm fork length) tagged on 21 August was recaptured on 1 September at the mouth of the Burnside River in Bathurst Inlet, approximately 200 km away. One lake trout captured in Roberts Bay on 12 August 2003 was originally tagged on 28 August 2002 in Roberts Outflow.

## ACKNOWLEDGEMENTS

The authors would like to thank Hugh R. Wilson (Manager, Environmental Affairs, Miramar Mining Corporation / Miramar Hope Bay Ltd.) for offering us the opportunity of working on this project and providing valuable information and guidance during the field program. Dwayne Windsor, Claire Aldrid and Tim Klukewich of the Windy Lake camp were extremely helpful in arranging logistical support for the field work. Able and enthusiastic assistance provided by Richard Ehakataiok of Cambridge Bay, David Swaton of Miramar Mining, and Alvin Palongayak of Gjoa Haven is also gratefully acknowledged.

The following Golder Associates personnel participated in the preparation of the report:

Gary Ash	- Study Director and Senior Reviewer
Alison Little	- Project Manager and Principal Author
Dave Hamilton	- Senior Aquatic Scientist and Co-author
Nathan Schmidt	- Senior Hydrologist and Co-author
Jacek Patalas	- Senior Fisheries Biologist and Senior Reviewer
Rob Stack	- Fisheries Biologist
Jim Campbell	- Fisheries Biologist
Jan den Dulk	- Fisheries Biologist
Paul St. Rose	- Drafting
Bob McDonald	- Drafting
Angela Wight	- Word Processing

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## 1.0 INTRODUCTION

### 1.1 GENERAL

Miramar Hope Bay Limited (MHBL) proposes to construct and operate a new underground gold mine (“Doris North Project”) in the West Kitikmeot Region of Nunavut. The project is located 685 km northeast of Yellowknife and 160 km southwest of Cambridge Bay. The mine is on Inuit owned land, approximately 5 km south of the Arctic Ocean. The nearest communities are Umingmaktok, located 65 km to the west and Bathurst Inlet located 110 km to the southwest.

Environmental baseline studies within the Doris North zone were carried out in 1995 (Klohn Crippen 1995), 1996 (Rescan 1997), 1997 (Rescan 1998), 1998 (Rescan 1999), and 2000 (Rescan 2001). All data collected up to 2000 were summarized in a data compilation report (RL&L/Golder 2002). Additional studies were conducted in 2002 to investigate fish populations in Roberts Lake and in the near-shore areas of Roberts Bay; these studies were summarized in RL&L/Golder (2003).

In 2003, Miramar Mining Corporation retained Golder Associates Ltd. to expand the baseline data collected during the previous studies and to address potential issues related to changes in the design of the Doris North Project. The specific objectives of the 2003 field program included:

- continued monitoring of use of the Roberts Lake system by Arctic char;
- determining seasonal movement patterns in near-shore areas of Roberts Bay;
- assessing fish use of near-shore habitat in Doris, Roberts and Little Roberts lakes;
- conducting habitat surveys in Roberts Lake;
- sampling of water quality in selected lakes and streams (Roberts, Little Roberts, Doris, and Tail lakes and Little Roberts, Doris, and Tail outflows);
- seasonal monitoring of discharge and water temperature in Doris, Roberts and Little Roberts outflows; and,
- initial scoping of potential fish collection sites for the design of the Metal Mining Environmental Effects Monitoring (EEM) program.

The field program was conducted between 21 July and 9 September 2003. The results are summarized for each study component in the following sections.

## 1.2 SAMPLING PROGRAM IN 2003

Figure 1.1 provides an overview of the Doris North Project study area. Lakes that were sampled as part of the baseline studies within the project area in 2003 included Roberts, Little Roberts, Doris, and Tail lakes (Figure 1.2). Also sampled were Roberts, Little Roberts, Doris, and Tail outflows, as well as several small tributaries to Roberts Lake. The marine environment of Roberts Bay was sampled at the proposed jetty site and near the mouth of Little Roberts Outflow as the main receiving waterbody downstream of the proposed mining development. Glenn, Windy and Pelvic Lake drainages (including Reference A Lake) are located outside of the potential zone of impact from the project. As such, these drainages were considered as control basins and were sampled to provide reference data for future aquatic effects monitoring programs. Data collection sites and sampling methods used in 2003 are summarized in Table 1.1.

**Table 1.1 Doris North Project aquatic sampling program, 2003.**

Waterbody	Bathymetry	Discharge	Water Quality	Fish Populations			
				Fish Fence	Fyke Net	Gill Nets	Electro-fishing
Doris Lake		✓	✓		✓	✓	✓
Tail Lake			✓				
Roberts Lake	✓		✓ (2 sites)		✓	✓	
Little Roberts Lake	✓		✓		✓	✓	✓
Reference A Lake			✓				✓
Doris Outflow			✓				✓
Tail Outflow		✓	✓				✓
Roberts Outflow		✓		✓	✓		✓
Roberts Inflows		✓					✓
Little Roberts Outflow		✓	✓				✓
Pelvic Inflow							✓
Pelvic Outflow							✓
Glenn Outflow		✓					✓
Windy Outflow		✓					✓
Roberts Bay	✓				✓	✓	

## 1.3 OVERVIEW OF REPORT

To facilitate subsequent integration of the 2003 data with the previous data collected in 1995-2000 and 2002, the format and organization of the present report follows closely the outline used in the previous reports (RL&L/Golder 2002, 2003). As such, this report is organized by major disciplines, with a separate discussion for each sampled waterbody. Environmental disciplines are presented as separate sections in the following order: lake bathymetry and substrate, stream discharge, water quality, and fish communities. All data and analytical results are provided as appendices at the end of the report.

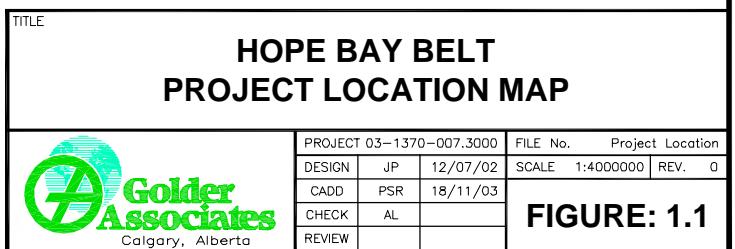


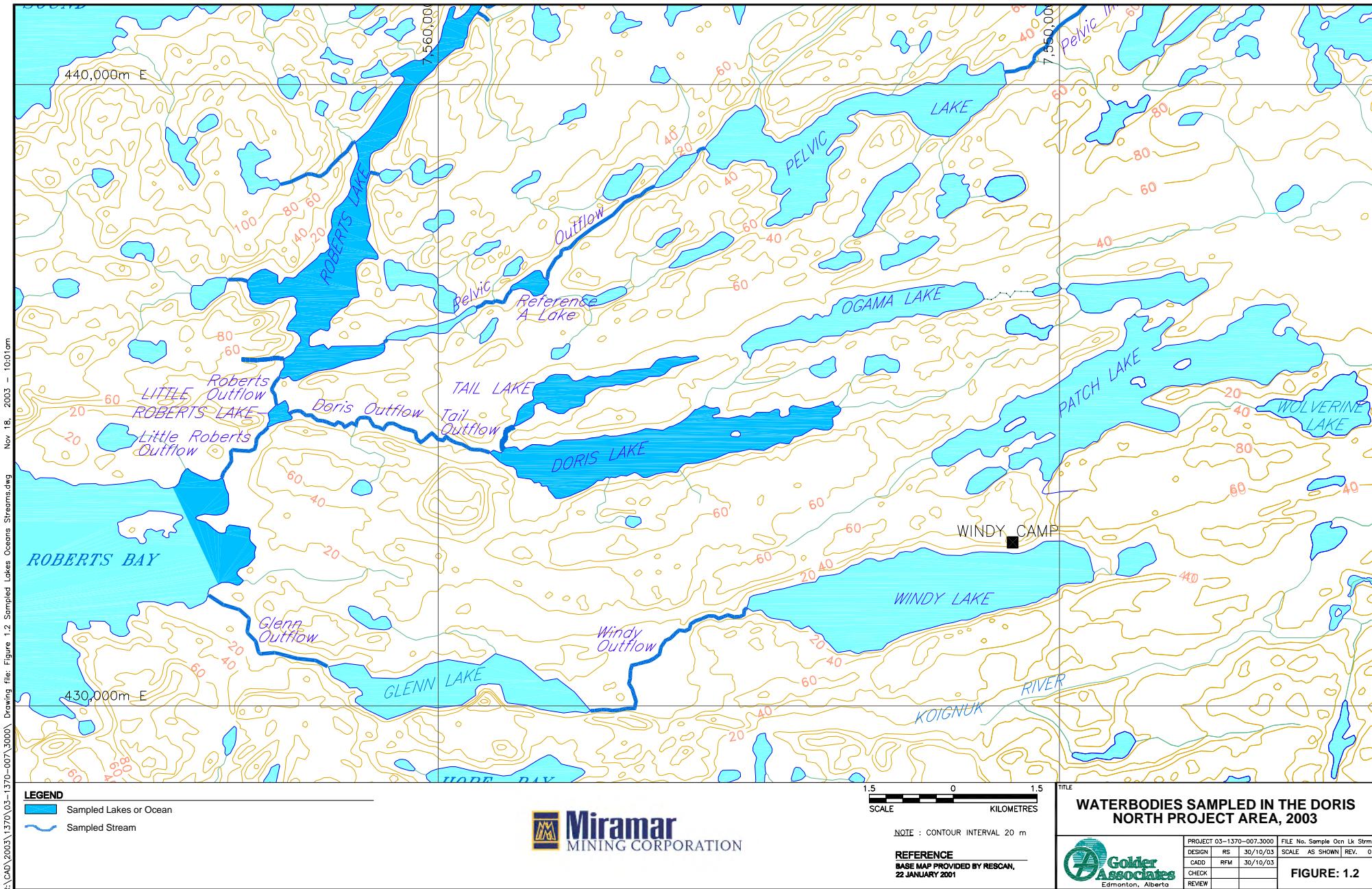
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SCALE KILOMETRES

REFERENCE  
BASE MAP PROVIDED BY RESCAN,  
FEBRUARY 17, 1998



**Miramar**  
MINING CORPORATION





## 2.0 BATHYMETRY

### 2.1 METHODS

Bathymetric surveys were conducted for Roberts Lake, Little Roberts Lake, and Roberts Bay in August and September 2003. The surveys were carried out using a BioSonics (Model DT-X) scientific hydroacoustic system. The system uses a digital split beam transducer and geo-references data points to provide real-time depth displays. All data are stored directly to the computer hard disk and were subsequently exported for geographical information system (GIS) mapping. The Global Positioning System (GPS) used incorporated real time correction to give decimetre accuracy for location. Transect lines are provided in Appendix A.

The lake bathymetry maps were generated from the geo-referenced depth points using a specialized software (Surfer). The area of each isobath was digitally calculated in ArcView. The lake volumes were then calculated by summing the volumes of the individual strata calculated using the following formula:

$$V = \frac{1}{3}H ((A_1 + A_2 + (A_1 \times A_2))^{0.5})$$

where:  $V$  = volume of water;  $H$  = difference in depth between two successive depth contours;  $A_1$  = area of the lake within the outer depth contour being considered; and  $A_2$  = area of the lake within the inner contour line under consideration.

### 2.2 ROBERTS LAKE

The bathymetric map of Roberts Lake was based on 32 281 positions and soundings.

Roberts Lake is approximately 7.0 km long, with a maximum width of 1.9 km (Figure 2.1). This lake has an east-west axis and a perimeter of 21.6 km. Roberts Lake encompassed an area of 3.83 km<sup>2</sup> and had a water volume of 51.6 million m<sup>3</sup> (Table 2.1). There are four basins in Roberts Lake. The western end of the lake is shallow, with a maximum contour depth of 5 m. The main basin, located centrally in the lake, is deep with a maximum recorded depth of 39.1 m. Two other basins were located in the eastern section of the lake, both with maximum contour depths of 25 m. Overall, the mean water depth in Roberts Lake is 13.5 m. Two shoals are present along the south-central section of the lake (Figure 2.1).

**Table 2.1 Physical characteristics of Doris North waterbodies surveyed in 2003.**

Waterbody	Length (m)	Maximum Width (m)	Perimeter (m)	Area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Mean Depth (m)	Max. Depth (m)
Roberts Lake	7009	1856	21 573	3 830 828	51 641 534	13.5	37.5
Little Roberts Lake	512	340	1367	103 512	180 686	1.7	4.1
Surveyed area of Roberts Bay	N/A	N/A	N/A	767 428	N/A	3.3	8.9

Note: N/A = not applicable as only a section of the bay was surveyed.

## 2.3 LITTLE ROBERTS LAKE

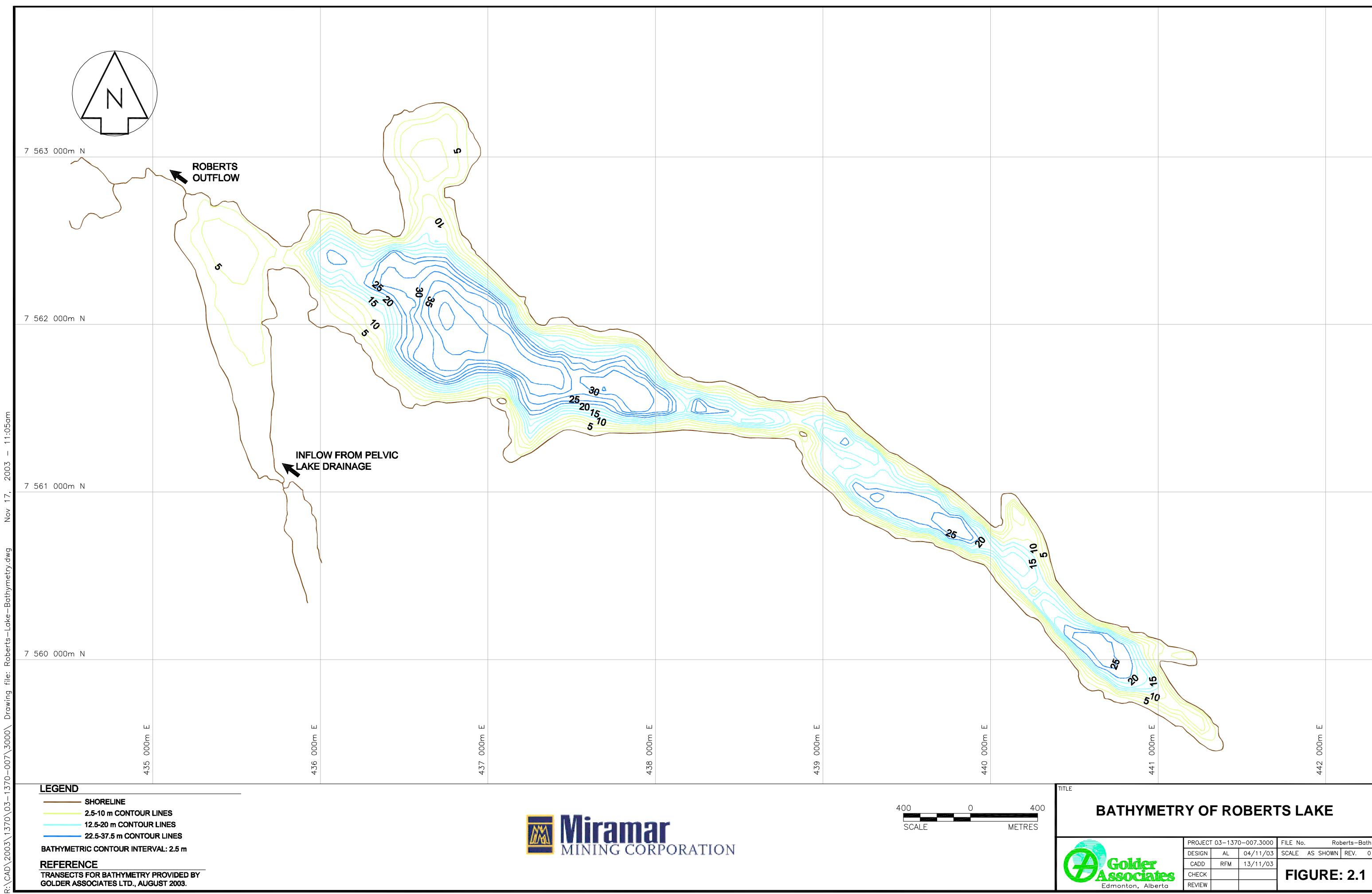
The bathymetric map of Little Roberts Lake was based on 6994 positions and soundings.

Little Roberts Lake is approximately 512 m long and has a maximum width of 340 m (Figure 2.2). The perimeter of this lake is 1.4 km. Little Roberts Lake encompassed an area of 0.10 km<sup>2</sup> and has a water volume of 0.18 million m<sup>3</sup> (Table 2.1). This lake is shallow, with a mean depth of 1.7 m and a maximum recorded depth of 4.1 m. The majority of Little Roberts Lake likely freezes to the bottom, since only 5.2% of the lake area and 3.2% of the lake volume is greater than 2.5 m in water depth.

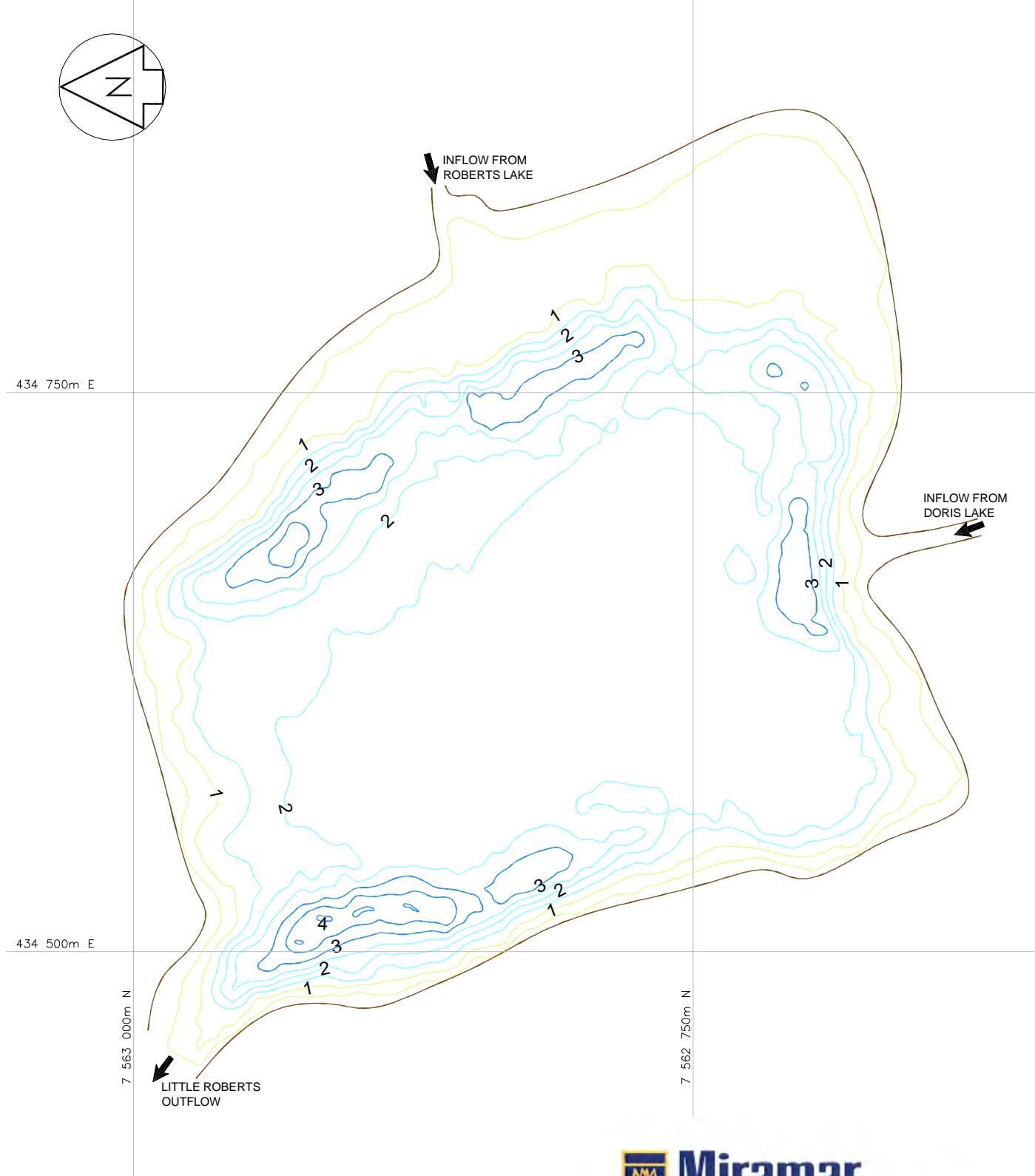
## 2.4 ROBERTS BAY

Detailed bathymetry was conducted in the west basin of Roberts Bay in the vicinity of the proposed jetty. The bathymetric map (Figure 2.3) was based on 6326 positions and soundings.

The area of the surveyed section of the bay is 0.77 km<sup>2</sup> (Table 2.1). Within this section of the bay, there is one main basin located to the north-west of the island. The maximum depth recorded is 8.9 m and the mean depth in the surveyed section of the bay is 3.3 m.





**LEGEND**

- SHORELINE
- 0.5-1 m CONTOUR LINES
- 1.5-2.5 m CONTOUR LINES
- 3-3.5 m CONTOUR LINES

BATHYMETRIC CONTOUR INTERVAL: 0.5 m

**REFERENCE**

TRANSECTS FOR BATHYMETRY PROVIDED BY GOLDER ASSOCIATES LTD., AUGUST 2003.

50 0 50  
SCALE METRES



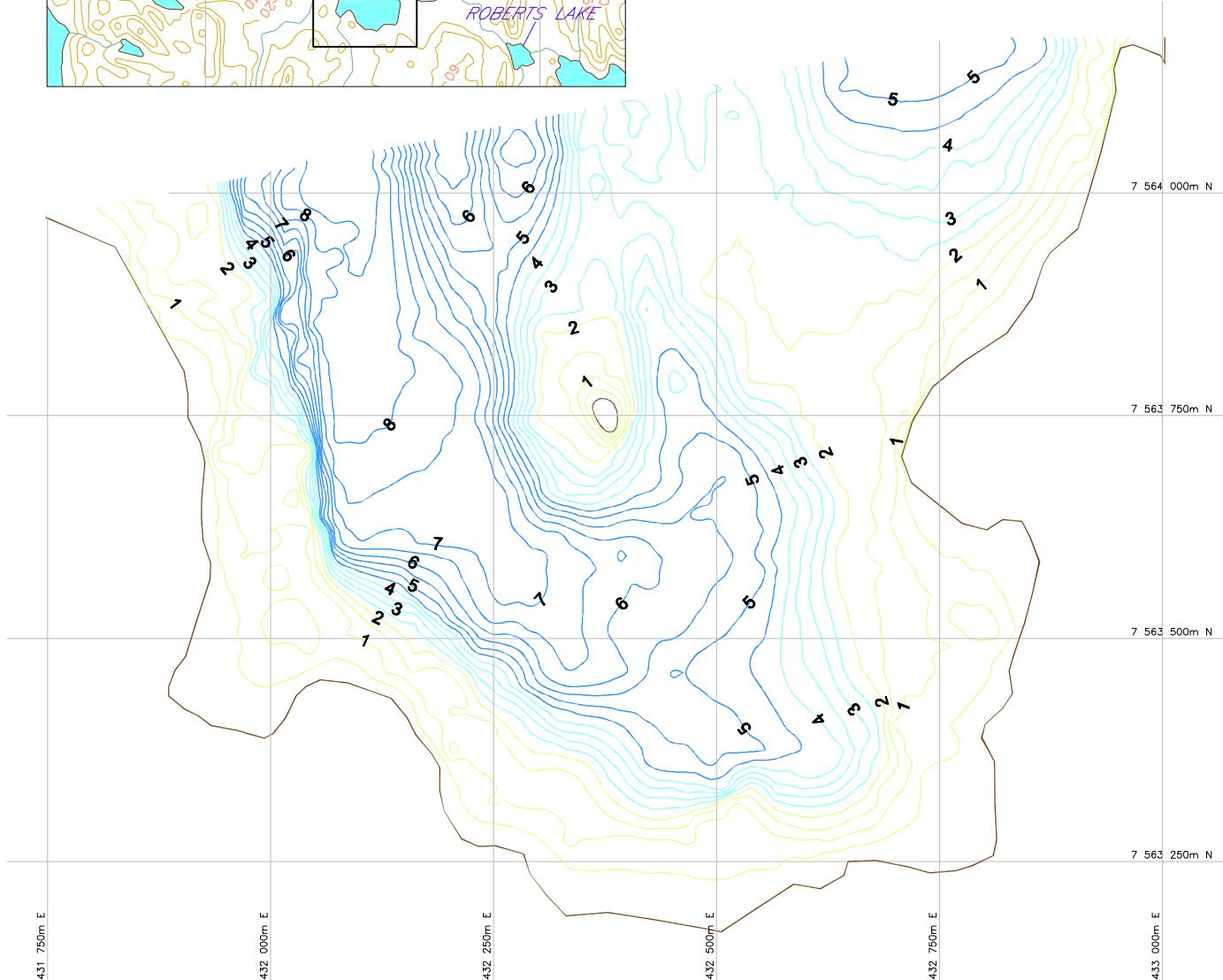
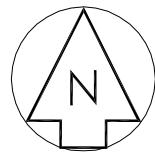
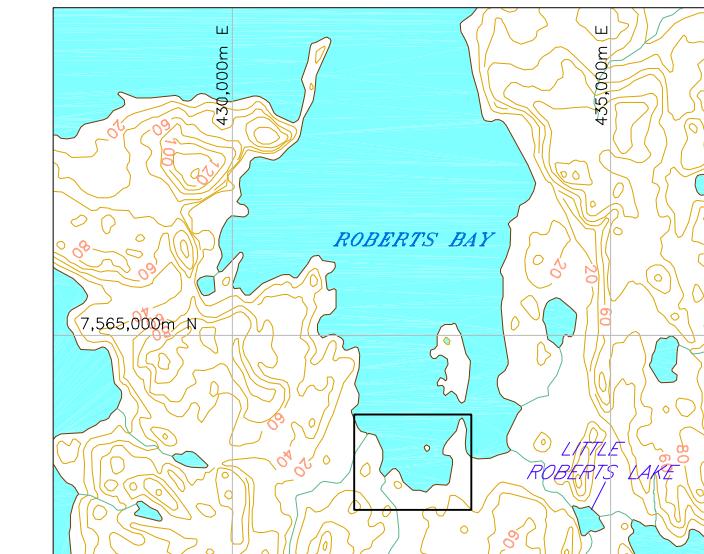
**Miramar**  
MINING CORPORATION

**TITLE****BATHYMETRY OF LITTLE ROBERTS LAKE**

 **Golder Associates**  
Calgary, Alberta

PROJECT 03-1370-007.3000			FILE No.	Lti	Rob	Lk	Bath
DESIGN	AL	05/11/03					
CADD	RFM	13/11/03					
CHECK							
REVIEW							

**FIGURE: 2.2**



#### LEGEND

- SHORELINE
- 0.5-2.0 m CONTOUR LINES
- 2.5-4.0 m CONTOUR LINES
- 4.5-8.5 m CONTOUR LINES

BATHYMETRIC CONTOUR INTERVAL: 0.5 m

#### REFERENCE

TRANSECTS FOR BATHYMETRY PROVIDED BY  
GOLDER ASSOCIATES LTD., AUGUST 2003.

150 0 150  
SCALE METRES



**Miramar**  
MINING CORPORATION

TITLE

#### BATHYMETRY OF ROBERTS BAY

 **Golder Associates**  
Calgary, Alberta

PROJECT 03-1370-007.3000	FILE No.	Rob Bay Bath
DESIGN	AL	05/11/03
CADD	RFM	13/11/03
CHECK		
REVIEW		

SCALE	AS SHOWN	REV. 0
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**FIGURE: 2.3**

## 3.0 STREAM DISCHARGE

### 3.1 METHODS

Hydrographs of the Doris Outflow, Roberts Outflow and Little Roberts Outflow at the Doris North project were derived using the following methodology:

- At each hydrometric station, a KPSI 730-series solid-state pressure transducer and Optimum Instruments DD-320 data logger were installed. The data logger was programmed to record water pressure measurements on a 15-minute interval. Also installed at each station was a permanent benchmark and a temporary staff gauge.
- During the first site visit, the water surface elevation was surveyed from the permanent benchmark, and the staff gauge and pressure transducer readings were recorded. A stream discharge measurement was performed according to Golder Technical Procedure TP-8.24-0.
- During subsequent site visits, stream discharge measurements were performed according to Golder Technical Procedure TP-8.24-0, and staff gauge readings were recorded. The data loggers at each station were downloaded during some visits to ensure that they were operating properly.
- During the last site visit, the water surface elevation was surveyed from the permanent benchmark and the staff gauge and pressure transducer readings were recorded. The pressure transducer and data logger were removed to prevent ice damage over the winter.
- When all data were available, the record of water surface elevation versus discharge was used to derive a stage-discharge rating curve for each station. This rating curve was then applied to the continuous record of water surface elevations, as measured by the pressure transducer and recorded by the data logger at each station, to derive a continuous record of discharges, or hydrograph.

### 3.2 DORIS LAKE OUTFLOW

A factsheet describing the location of the hydrometric site and equipment installed at the Doris Lake Outflow is provided in Appendix B. The appendix also contains stage-discharge data collected during 2003; the derived stage-

discharge rating curve; tabulated mean daily discharge and water level data; and manual discharge measurement data and calculation sheets.

The Doris Lake Outflow hydrometric station was visited 10 times during the summer of 2003 and a continuous hydrograph was derived for the period 30 June to 9 September. Details of each site visit are provided in Table 3.1 and the hydrograph from the station is presented in Figure 3.1.

**Table 3.1 Site visits to Doris Lake Outflow Hydrometric Station, summer 2003.**

Date	Activities	Discharge
30 June 2003	Installed station, surveyed water surface elevation, read staff gauge, measured discharge, downloaded data.	1.423 m <sup>3</sup> /s
1 July 2003	Read staff gauge, downloaded data.	n/a
31 July 2003	Downloaded data.	n/a
6 August 2003	Read staff gauge, measured discharge.	0.480 m <sup>3</sup> /s
8 August 2003	Read staff gauge, measured discharge.	0.411 m <sup>3</sup> /s
18 August 2003	Read staff gauge, measured discharge.	0.493 m <sup>3</sup> /s
20 August 2003	Measured discharge.	0.526 m <sup>3</sup> /s
28 August 2003	Read staff gauge, measured discharge.	0.538 m <sup>3</sup> /s
5 September 2003	Read staff gauge, measured discharge.	0.592 m <sup>3</sup> /s
9 September 2003	Surveyed water surface elevation, read staff gauge, removed station.	n/a

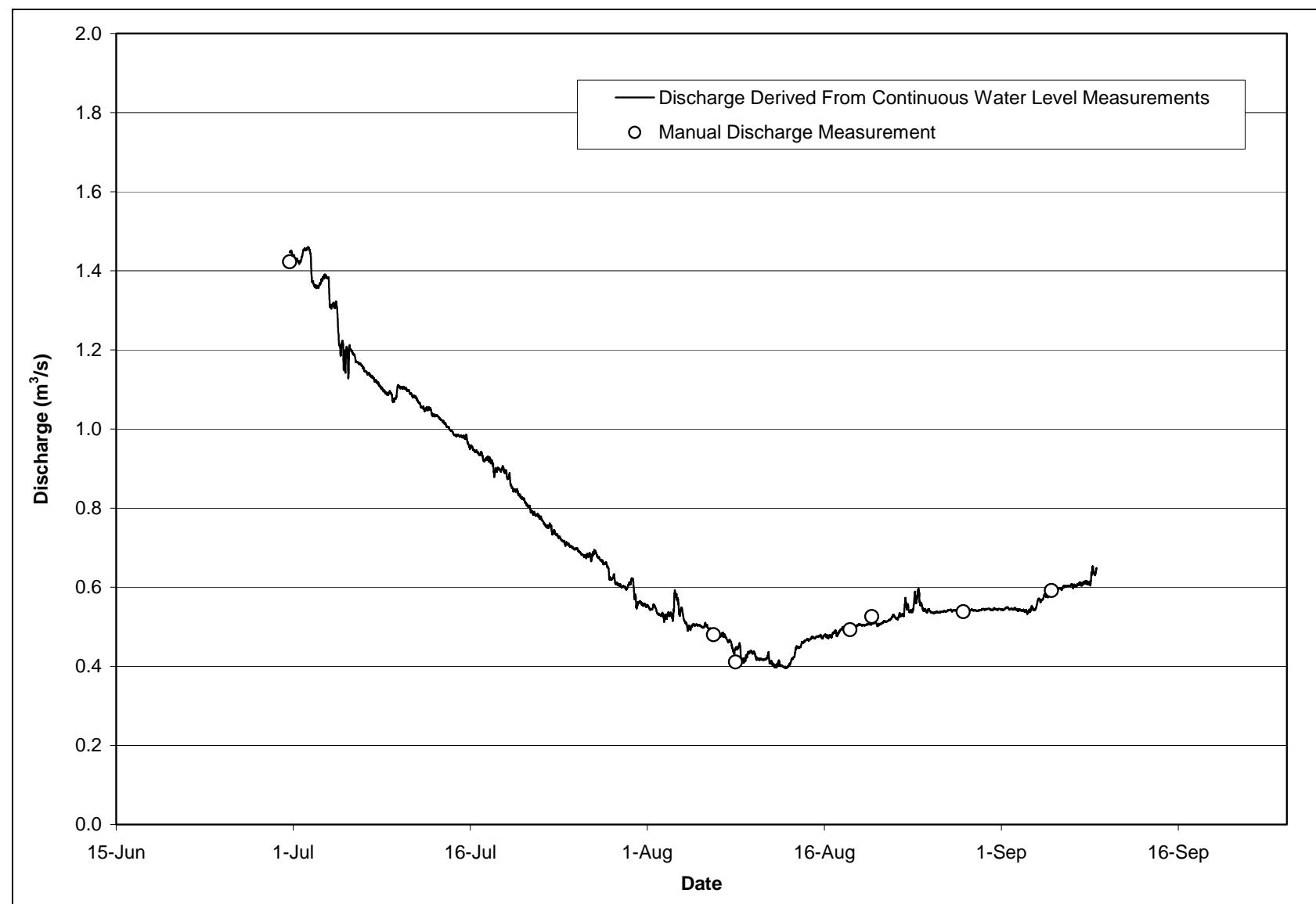


Figure 3.1 Hydrograph for Doris Lake Outflow, summer 2003.

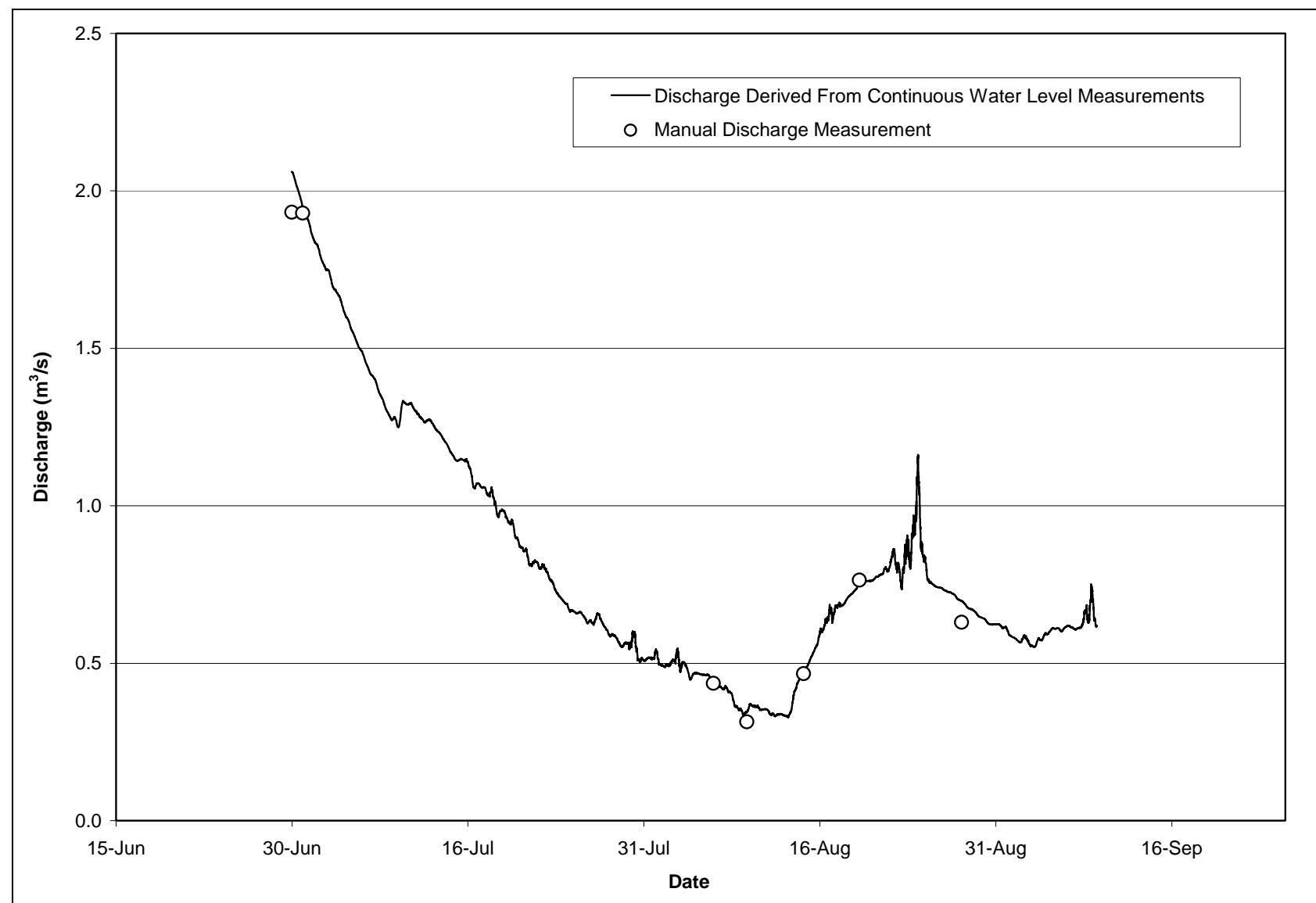
### 3.3 ROBERTS LAKE OUTFLOW

A factsheet describing the location of the hydrometric site and equipment installed at the Roberts Lake Outflow is provided in Appendix B. The appendix also contains stage-discharge data collected during 2003; the derived stage-discharge rating curve; tabulated mean daily discharge and water level data; and manual discharge measurement data and calculation sheets.

The Roberts Lake Outflow hydrometric station was visited nine times during the summer of 2003 and a continuous hydrograph was derived for the period 30 June to 9 September. Details of each site visit are provided in Table 3.2 and the hydrograph from the station is presented in Figure 3.2.

**Table 3.2 Site visits to Roberts Lake Outflow Hydrometric Station, summer 2003.**

Date	Activities	Discharge
30 June 2003	Installed station, surveyed water surface elevation, read staff gauge, measured discharge, downloaded data.	1.932 m <sup>3</sup> /s
1 July 2003	Read staff gauge, measured discharge, downloaded data.	1.929 m <sup>3</sup> /s
29 July 2003	Downloaded data.	n/a
6 August 2003	Read staff gauge, measured discharge.	0.436 m <sup>3</sup> /s
9 August 2003	Read staff gauge, measured discharge.	0.314 m <sup>3</sup> /s
14 August 2003	Read staff gauge, measured discharge.	0.467 m <sup>3</sup> /s
19 August 2003	Read staff gauge, measured discharge.	0.764 m <sup>3</sup> /s
28 August 2003	Read staff gauge, measured discharge.	0.630 m <sup>3</sup> /s
9 September 2003	Surveyed water surface elevation, read staff gauge, removed station.	n/a



**Figure 3.2 Hydrograph for Roberts Lake Outflow, summer 2003.**

### 3.4 LITTLE ROBERTS LAKE OUTFLOW

A factsheet describing the location of the hydrometric site and equipment installed at the Little Roberts Lake Outflow is provided in Appendix B. The appendix also contains stage-discharge data collected during 2003; the derived stage-discharge rating curve; tabulated mean daily discharge and water level data; and manual discharge measurement data and calculation sheets.

The Little Roberts Lake Outflow hydrometric station was visited eight times during the summer of 2003 and a continuous hydrograph was derived for the period 30 June to 9 September. Details of each site visit are provided in Table 3.3 and the hydrograph from the station is presented in Figure 3.3.

**Table 3.3 Site visits to Little Roberts Lake Outflow Hydrometric Station, summer 2003.**

Date	Activities	Discharge
30 June 2003	Installed station, surveyed water surface elevation, read staff gauge, measured discharge, downloaded data.	3.906 m <sup>3</sup> /s
1 July 2003	Read staff gauge, measured discharge, downloaded data.	3.714 m <sup>3</sup> /s
28 July 2003	Downloaded data.	n/a
5 August 2003	Read staff gauge, measured discharge.	0.901 m <sup>3</sup> /s
15 August 2003	Read staff gauge, measured discharge.	0.999 m <sup>3</sup> /s
28 August 2003	Measured discharge.	1.025 m <sup>3</sup> /s
5 September 2003	Read staff gauge, measured discharge.	1.323 m <sup>3</sup> /s
9 September 2003	Surveyed water surface elevation, read staff gauge, removed station.	n/a

The Little Roberts Lake Outflow hydrometric station was installed as a redundant measure, to allow discharges for the Doris Lake Outflow or Roberts Lake Outflow hydrometric stations to be back-calculated if either of those stations was to malfunction. In 2003, all three stations operated continuously with no malfunctions, so the data can be used as a check. The derived mean daily discharge for the Little Roberts Lake Outflow varied from -12% to +19% of the sum of the two tributaries, with 90% of the values falling within -12% to +10%. Some of the difference could be due to the attenuation of flow in Little Roberts Lake, but this comparison shows good consistency between stations. The total volume of flow measured over the monitoring period at the Little Roberts Lake Outflow was 2% greater than that of the two tributaries. The total drainage area at this station is 4% greater than the sum of the areas of the two tributary stations, so the data compare well.

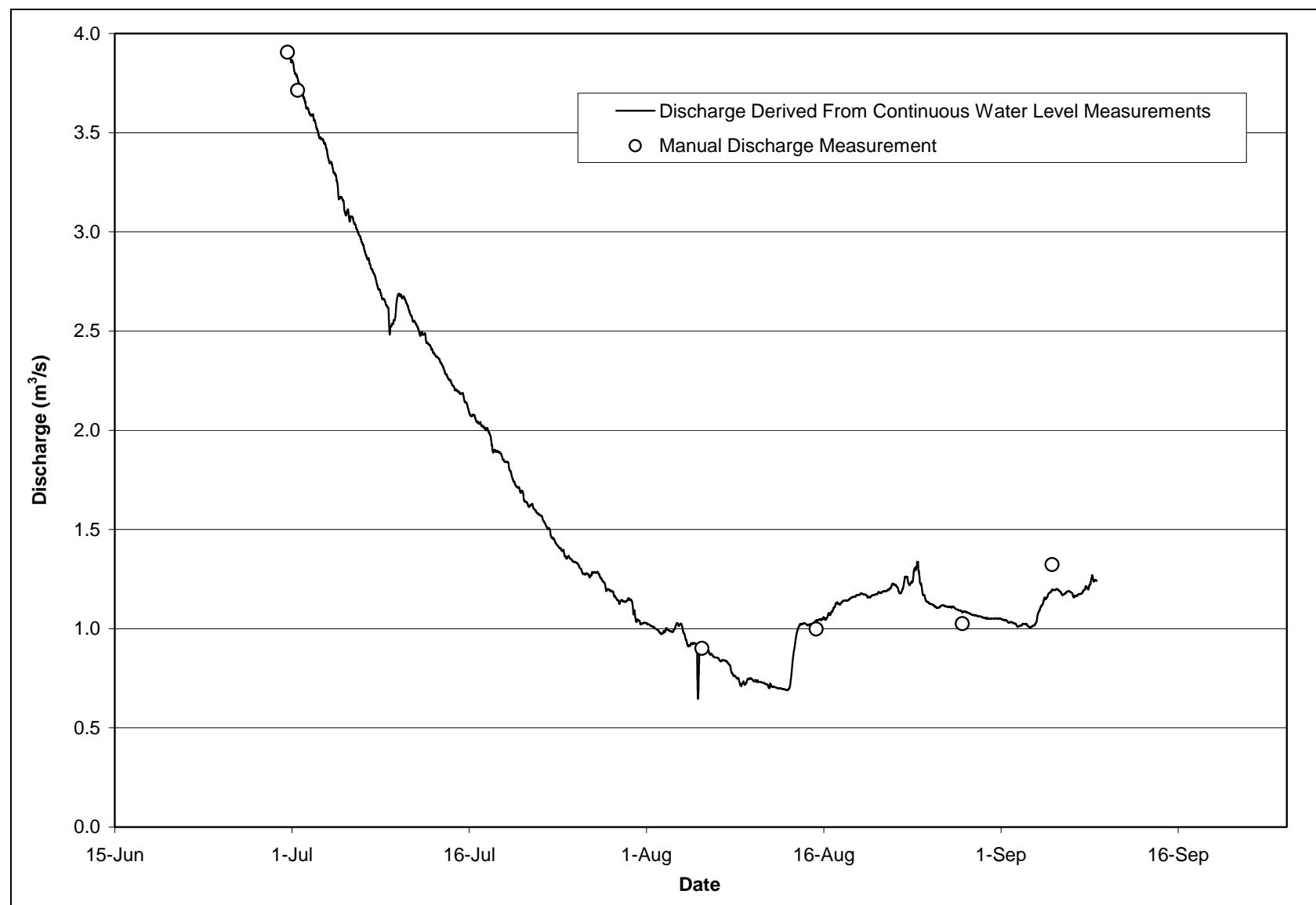


Figure 3.3 Hydrograph for Little Roberts Lake Outflow, summer 2003.

### 3.5 OTHER STREAMS

Limited manual discharge measurements were undertaken to support fisheries work at the Tail Lake Outflow, unnamed tributary to Roberts Lake, Glenn Lake Outflow and Windy Lake Outflow during the summer of 2003. No continuous water level or discharge measurements were acquired at these stations. Manual discharge measurement data and calculation sheets are presented in Appendix B and a summary of the discharge measurements is presented in Table 3.4.

**Table 3.4 Manual discharge measurements to support fisheries work at Miramar Doris North, summer 2003.**

Date	Activities	Discharge
30 June 2003	Tail Lake Outlet – Discharge Measurement	0.045 m <sup>3</sup> /s
6 August 2003	Tail Lake Outlet – Discharge Measurement	0.009 m <sup>3</sup> /s
8 August 2003	Tail Lake Outlet – Discharge Measurement	0.007 m <sup>3</sup> /s
18 August 2003	Tail Lake Outlet – Discharge Measurement	0.018 m <sup>3</sup> /s
28 August 2003	Tail Lake Outlet – Discharge Measurement	0.007 m <sup>3</sup> /s
5 September 2003	Tail Lake Outlet – Discharge Measurement	0.016 m <sup>3</sup> /s
19 August 2003	Unnamed Tributary to Roberts Lake – Discharge Measurement	0.005 m <sup>3</sup> /s
19 August 2003	Glenn Lake Outflow – Discharge Measurement	0.259 m <sup>3</sup> /s
6 September 2003	Windy Lake Outflow – Discharge Measurement	0.265 m <sup>3</sup> /s

## 4.0 PHYSICAL LIMNOLOGY AND WATER QUALITY

This section presents information on baseline water quality conditions for selected lakes and streams in the study area (Figure 4.1; Appendix C). Water samples were collected on three separate occasions during the 2003 field seasons, between 26 July and 5 September.

### 4.1 METHODS

#### 4.1.1 Field Sampling Locations and Procedures

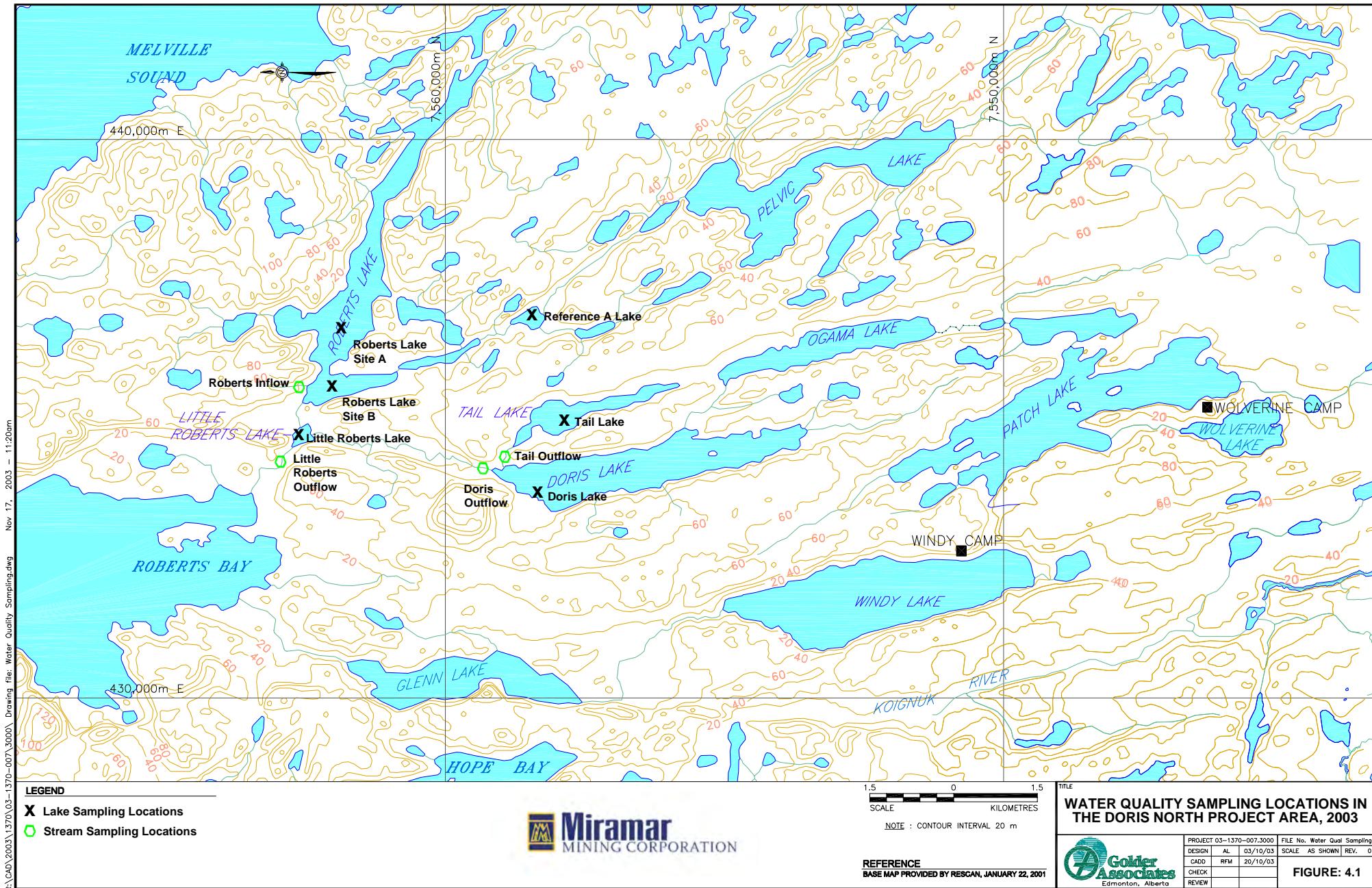
##### ***Lakes***

Limnological and water quality stations were established on Doris Lake, Tail Lake, Little Roberts Lake, Reference Lake A, and two stations were sampled in Roberts Lake (Figure 4.1). Lake sampling stations were situated in the deep basin of each lake.

Dissolved oxygen and temperature profile data were recorded during the 2003 ice-free season. Temperature and dissolved oxygen were measured with an Oxyguard™ Handy Mark II dissolved oxygen and temperature meter, which was accurate to within  $\pm 0.1$  mg/L for dissolved oxygen and to within  $\pm 0.1^{\circ}\text{C}$  for water temperature. Readings were taken at 1 m intervals along a vertical transect from surface to near bottom. The deepest measurement for each profile was taken 0.5 m above the lake bottom to avoid contamination of the probe by fine sediments.

Water transparency was measured to the nearest 0.1 m with a standard Secchi disk (20 cm diameter). The depth at which a Secchi disk disappears from sight is a standard index of transparency. The euphotic zone (lower limit = approximate depth to which 1% of incident light penetrates) coincides with approximately twice the Secchi depth.

Phytoplankton chlorophyll *a* samples were collected three times during the open water period (end of July, mid August and beginning of September) to ascertain productivity levels. Samples were collected from the euphotic zone, which is equal to the depth of 1% light penetration (approximately two times the Secchi depth). A sample consisted of a composite of five discrete vertical collections within this zone, which were made using a weighted plastic tube. In lakes that were shallower than two times the Secchi depth, phytoplankton hauls encompassed the entire water column to 0.5 m above the lake bottom (to avoid contamination of the sample with sediment). Samples were filtered (5 mL) onto Whatman GF/C filter paper, covered with anhydrous  $\text{MgCO}_3$ , and frozen.



Equipment was thoroughly rinsed before and after sampling at each site to prevent contamination.

Water quality samples also were collected from the euphotic zone. Samples analyzed for physical and conventional parameters, major ions, and metals were collected at a 1 m depth using a VanDorn water bottle; samples destined for nutrient analyses were collected using the same methods for phytoplankton chlorophyll *a* samples. Equipment was thoroughly rinsed before and after sampling at each site to prevent contamination. Sample bottles were provided by the laboratory and were labeled with the sample location and date, and the appropriate preservative was added (if required). All samples were kept cool until they were delivered to the laboratory.

### **Streams**

Water samples were taken from the outflow streams of Doris Lake, Tail Lake, Little Roberts Lake, and an unnamed tributary to Roberts Lake using surface grabs (approximately 0.1 m below the water surface). Water temperature was continuously monitored in three streams (Doris, Roberts, and Little Roberts outflows) to provide a database of seasonal changes and daily temperature fluctuations during the open water period of 2003 (July until early September). VemcoTM thermographs were deployed in the streams and were set to electronically record water temperatures ( $\pm 0.1^{\circ}\text{C}$ ) at 30 min intervals.

#### **4.1.2 Laboratory Analytical Procedures**

Water samples were analyzed for a variety of physical and chemical parameters including nutrients (phosphorus, nitrogen, carbon), metals (total), major ions (cations and anions), and physical properties (TSS, TDS). Analyses were carried out by PSC Analytical Services, Edmonton, Alberta. Metals analyses were undertaken only for the July sample, with the exception being mercury for which low level mercury samples were collected during early September.

Quality control of sample handling and analytical analysis were checked through the use of split samples (see results of Roberts Lake Site B) and the inclusion of a trip blank. Upon reviewing the data, it would appear that the lab did not use distilled de-ionized water for the trip blank. The presence of chloride and fluoride suggest that tap water was erroneously placed in the trip blanks. Split samples taken from Roberts Lake indicate consistency in the analytical measurements.

There were also problems experienced with the July samples, as a result of the lab providing improper directions for preservation of the water samples. This resulted in the failure of the nitrogen analysis in the late July sample.

## 4.2 LAKE WATER QUALITY

Secchi depth, dissolved oxygen, and temperature data are summarized in Appendix C1. Chlorophyll *a* and phaeophytin concentrations are provided in Appendix C2. Analytical results of the water quality data for the 2003 sampling program are presented in Appendix C2.

### 4.2.1 Doris Lake

Dissolved oxygen concentrations were uniform throughout the water column during the three sampling sessions, ranging from 11 to 12 mg/L near the surface to 9.5 mg/L near the bottom (Figure 4.2). All of the values were well above the minimum Canadian Water Quality Guidelines (CWQG; CCME 2001) for supporting aquatic life of 6.5 mg/L. During the late August and September sample sessions, the dissolved oxygen concentrations at depths of greater than 10 m were approaching the CWQG limits of 9.5 mg/L for early life stages of fish. This depletion of oxygen is most likely a result of the decomposition of organic material in the lake sediments and deeper portions of the water column.

During the 2003 open water season, Doris Lake was well mixed and isothermal. In late August, the water below 9 m was slightly cooler, but not enough to consider the lake to be thermally stratified (Figure 4.2).

Algal biomass in Doris Lake peaked in late July. The chlorophyll *a* concentration was 8.08 mg/m<sup>3</sup> in the 25 July sample (Appendix C2). There was a slight decrease in mid August to 7.12 mg/m<sup>3</sup>, followed by an increase again in early September to 7.92 mg/m<sup>3</sup>. This trend was different from the other lakes sampled in 2003, where peaks in chlorophyll *a* concentrations occurred in early September. Secchi depth remained constant, at approximately 1.8 m, during the three sampling sessions.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits.

### 4.2.2 Tail Lake

Dissolved oxygen concentrations were uniform throughout the water column during the three sampling sessions, ranging from 10.7 to 11 mg/L (Figure 4.3). During the 2003 open water season, Tail Lake was well mixed and isothermal (Figure 4.3).

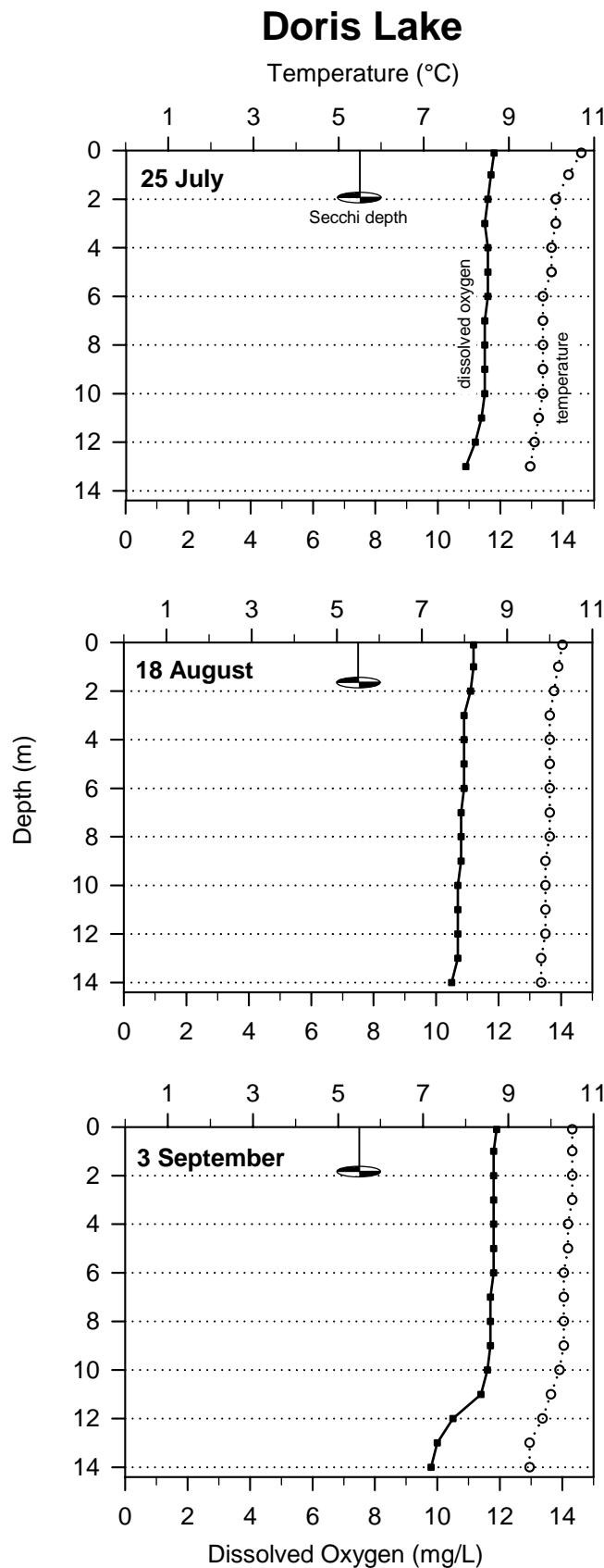


Figure 4.2 Temperature (top scale; dotted line) and dissolved oxygen (bottom scale; solid line) profiles, and Secchi depth for Doris Lake, 2003.

Algal biomass in Tail Lake peaked in early September. The chlorophyll *a* concentration was 0.53 mg/m<sup>3</sup> in the 25 July sample (Appendix C2). There was a slight decrease in mid August to 0.16 mg/m<sup>3</sup>, followed by an increase again in early September to 1.55 mg/m<sup>3</sup>. Secchi depth decreased from 5 m in July to less than 2.0 m in September. This change reflects the late summer plankton bloom.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits.

#### 4.2.3 Roberts Lake

Two basins in Roberts Lake were sampled. Site A was situated in the deepest portion of the main central basin and Site B was situated in the western basin (Figure 4.1).

The July temperature profiles for both sites suggest that the lake is thermally stratified by late July (Figure 4.4). At Site A, the epilimnion extended from the surface to approximately 5 m in depth. The metalimnion extended to approximately 10 m and the hypolimnion encompassed depths greater than 10 m. At Site B (a shallower site), the thermal stratification was less pronounced. The epilimnion was found within 1 m of the surface and the hypolimnion started at approximately 4 m (Figure 4.4). By mid August, the thermal stratification had broken down and both basins were uniformly mixed.

Dissolved oxygen concentrations at Site A were uniform throughout the water column during the three sampling sessions, ranging from 10.4 to 12.9 mg/L (Figure 4.4). At Site B, there was a slight increase in dissolved oxygen, as a result of the colder water below the thermocline. There was a slight decrease in dissolved oxygen near the bottom of the lake at Site B, likely a result of decomposition of organic material in the lake sediment (Figure 4.4).

Algal biomass in Roberts Lake peaked in early September. The chlorophyll *a* concentration was 1.17 mg/m<sup>3</sup> in the 23 July sample (Appendix C2). There was a slight increase in mid August to 1.39 mg/m<sup>3</sup>, followed by a larger increase again in early September to 3.50 mg/m<sup>3</sup>. Secchi depth at Site A remained constant during the 2003 sampling sessions, at approximately 2.7 m. Secchi depth at Site B decreased from 2.1 m in July to 1.5 m in September. This change reflects the late summer plankton bloom.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits.

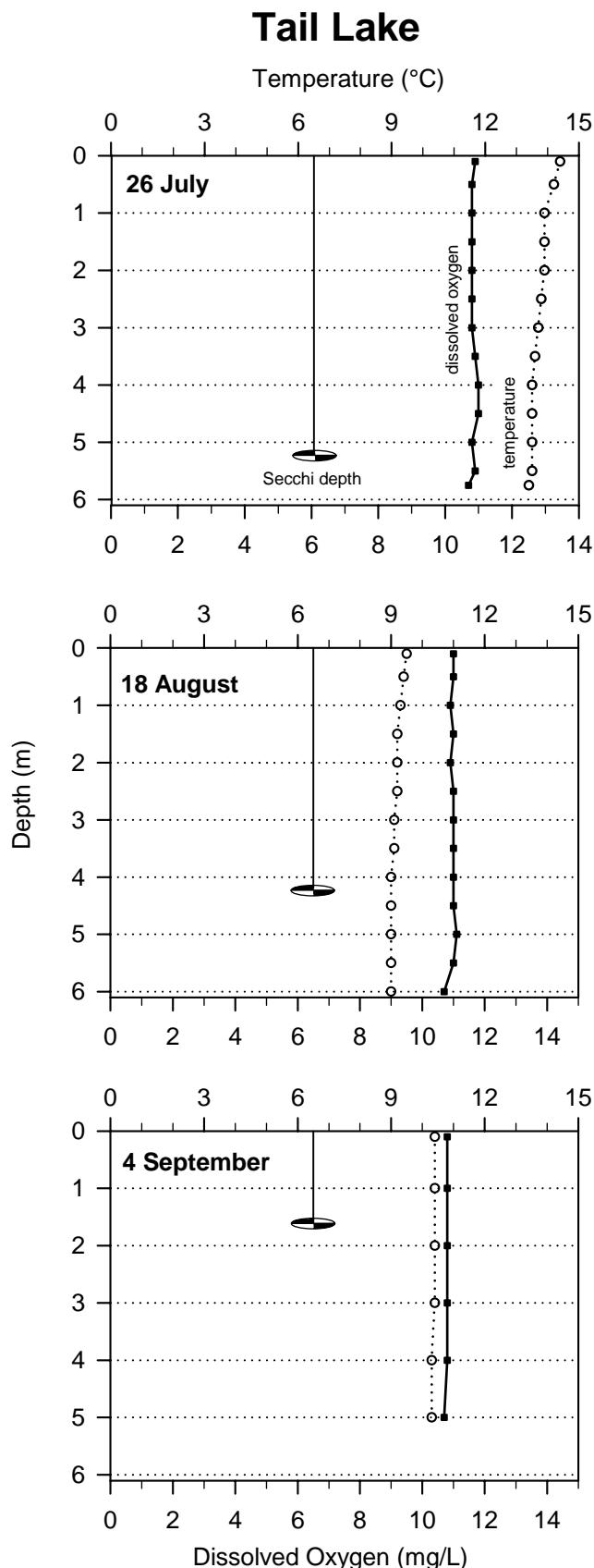


Figure 4.3 Temperature (top scale; dotted line) and dissolved oxygen (bottom scale; solid line) profiles, and Secchi depth for Tail Lake, 2003.

# Roberts Lake

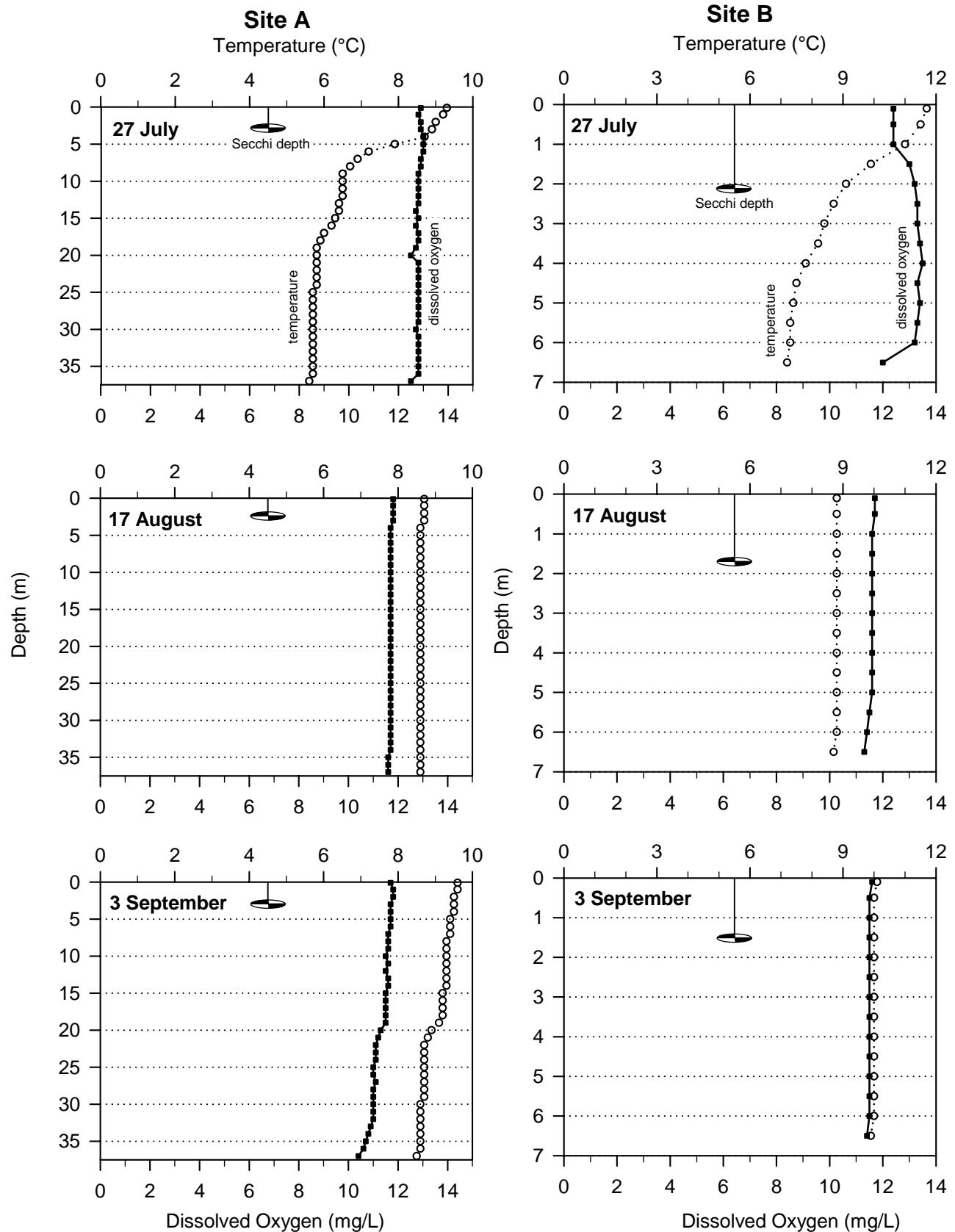


Figure 4.4 Temperature (top scale; dotted line) and dissolved oxygen (bottom scale; solid line) profiles, and Secchi depth for Sites A and B in Roberts Lake, 2003.

#### 4.2.4 Little Roberts Lake

Dissolved oxygen concentrations were uniform throughout the water column during the three sampling sessions, ranging from 11.0 to 11.5 mg/L (Figure 4.5). During the 2003 open water season, Little Roberts Lake was well mixed and isothermal (Figure 4.5).

Algal biomass in Little Roberts Lake peaked in early September. Chlorophyll *a* concentrations ranged from 2.00 mg/m<sup>3</sup> in July to 6.50 mg/m<sup>3</sup> in September. Secchi depth decreased from 2.2 m in July to 1.7 m in September, which would reflect the late summer plankton bloom.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits.

#### 4.2.5 Reference Lake A

Reference Lake A exhibited the highest water temperatures of all the lakes sampled in 2003, with surface temperatures reaching 16.2°C in late July (Figure 4.6). During the open water season of 2003, Reference Lake A was well mixed and isothermal. The first metre of the water column was slightly warmer than the rest of the lake in July but not enough to consider the lake thermally stratified.

Dissolved oxygen concentrations were near uniform throughout the water column during the three sampling sessions, ranging from 10.7 to 11.7 mg/L (Figure 4.6). All of the values were well above the minimum CWQG criteria of 6.5 mg/L for supporting aquatic life. However, during the July sample session, the dissolved oxygen concentrations at depths of 4.5 and 5.0 m were below the CWQG limits of 9.5 mg/L for early life stages of fish. This decrease in oxygen may have resulted from a combination of light winds (i.e., little or no mixing) and high rates of decomposition as a result of the very warm water temperatures in July.

Algal biomass in Reference Lake A also peaked in early September (Appendix C2). Chlorophyll *a* concentrations were 3.17 mg/m<sup>3</sup> in the 26 July sample. Chlorophyll *a* concentrations doubled in August to 7.36 mg/m<sup>3</sup> and then doubled again to 16.31 mg/m<sup>3</sup> in September. Secchi depth decreased from 1.2 m in July to 0.7 m in September, which would reflect the late summer plankton bloom.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits, with the exception of aluminum. The aluminum concentration in Reference Lake A was 101 µg/L, whereas the CWQG limit is 100 µg/L.

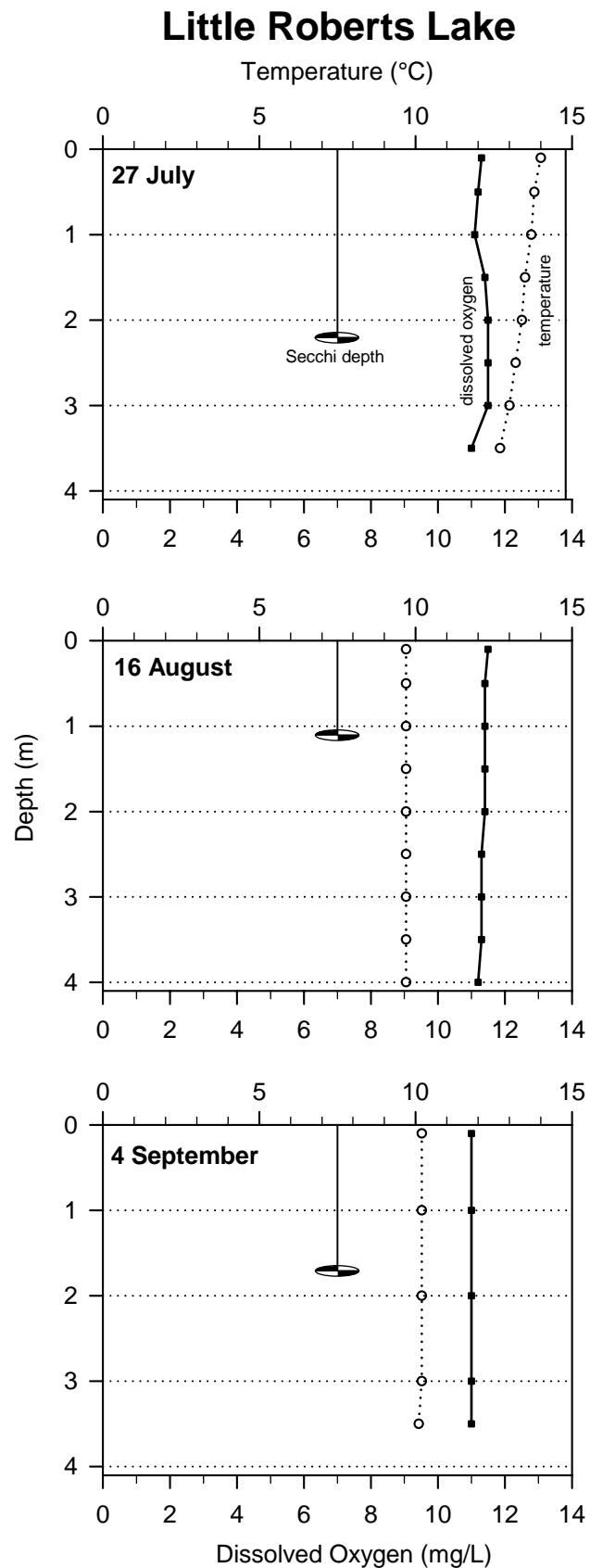


Figure 4.5 Temperature (top scale; dotted line) and dissolved oxygen (bottom scale; solid line) profiles, and Secchi depth for Little Roberts Lake, 2003.

## Reference Lake A

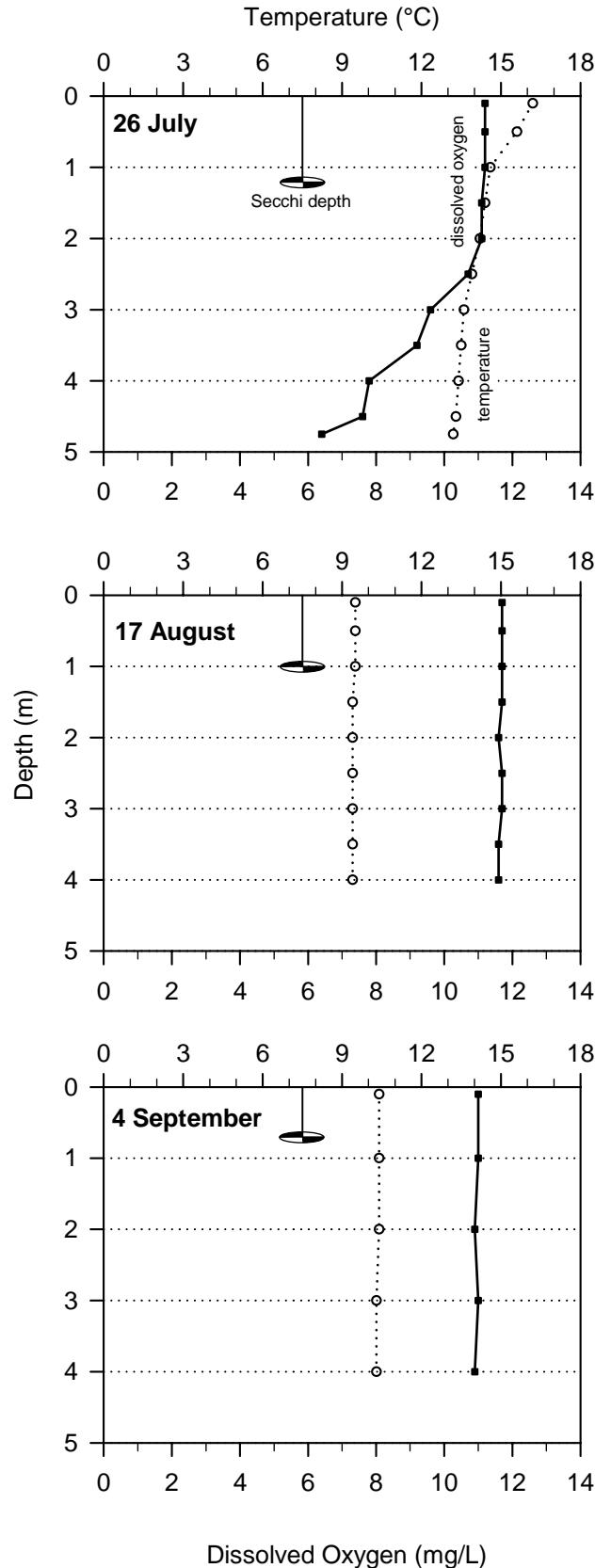


Figure 4.6 Temperature (top scale; dotted line) and dissolved oxygen (bottom scale; solid line) profiles, and Secchi depth for Reference Lake A, 2003. (Note scale change in axes).

#### 4.2.6 Summary

The lakes sampled in 2003 were generally isothermal and uniformly mixed. Roberts Lake was the only lake that exhibited a brief period of thermal stratification. As a result of the wind driven mixing, dissolved oxygen concentrations were suitable for supporting aquatic life. Reference Lake A was the only lake that had oxygen levels that were below the minimum CWQG criteria for early life stages of fish (9.5 mg/L), but this only occurred for depths of 4.5 and 5.0 m.

The water quality constituents for the lakes sampled in 2003 were within the limits established by CWQG, with the exception of aluminum concentrations in Reference Lake A, which slightly exceeded the CWQG limit of 100 µg/L.

### 4.3 STREAM WATER QUALITY

Analytical results of the water quality data for the 2003 sampling program are presented in Appendix C2. Thermograph data are provided in Appendix C3.

#### 4.3.1 Doris Outflow

Water temperature of Doris Outflow was measured daily between 28 July and 9 September 2003. Values ranged from 8.1°C on 25 to 27 August to 13.9°C on 30 July (Figure 4.7 and Appendix C3). The trend in fluctuations was similar to Little Roberts Outflow; however, the fluctuations were not as pronounced. Mean daily water temperatures during August ranged from 8.9 to 12.6°C. Due to the warm weather at the beginning of September, mean daily water temperatures remained between 8.7 and 10.6°C.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits. Water quality characteristics in the outflow stream were very similar to that of Doris Lake.

#### 4.3.2 Tail Outflow

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations in Tail Outflow were within guideline limits. Conductivity and ion concentrations were elevated in the outflow, compared to the concentrations in the lake, which is probably a reflection of the local geology.

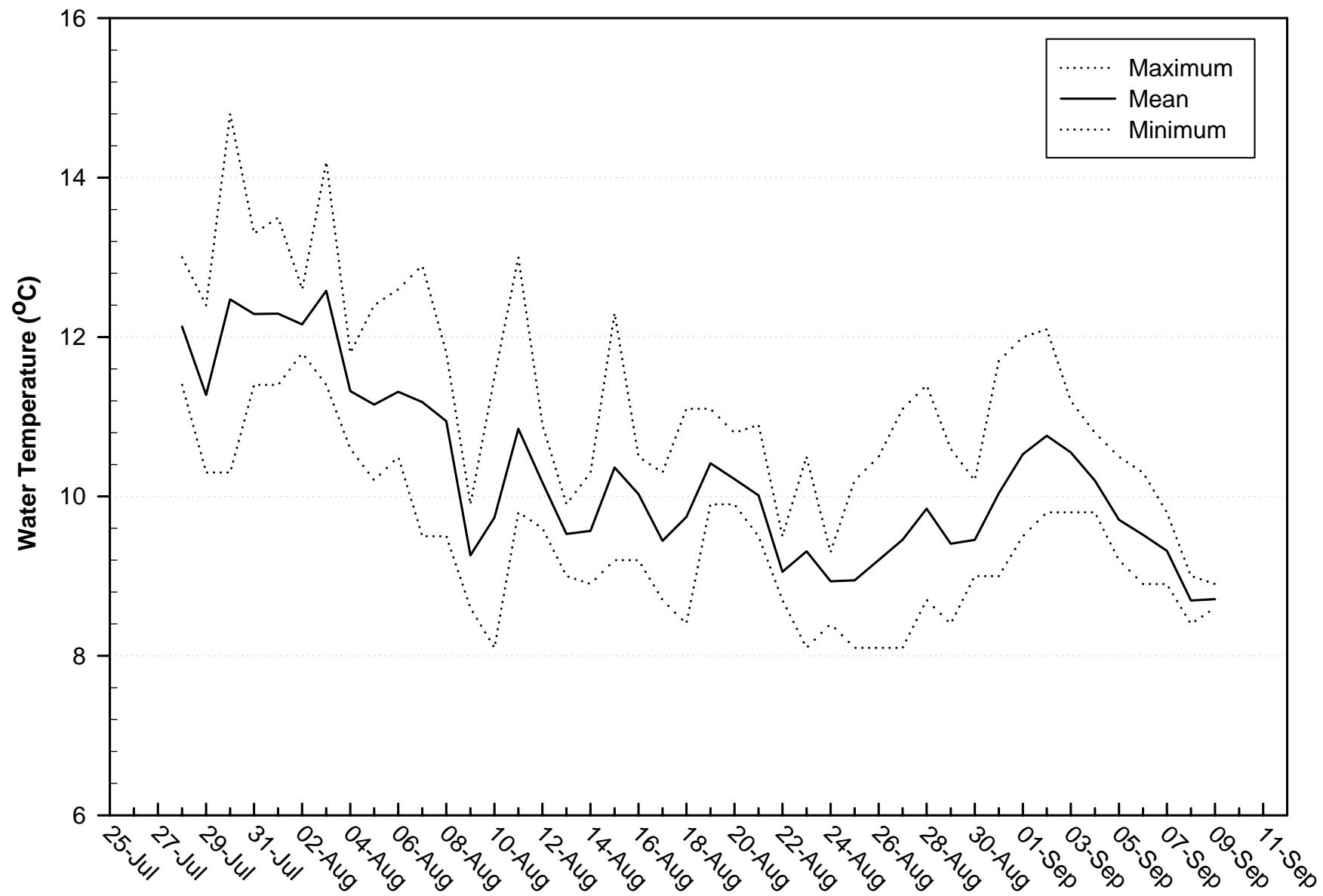


Figure 4.7 Daily water temperatures in Doris Outflow, Doris North Project (July to September 2003).

#### **4.3.3 Unnamed Tributary to Roberts Lake**

A single water sample was taken from an unnamed tributary to Roberts Lake at the northwest end of the lake. An abandoned silver mine is located in close proximity to the stream. Most of the water quality constituents examined were elevated in this tributary compared to other nearby streams sampled during the 2003 sampling program. In addition, both aluminum and copper exceeded the CWQG criteria. Aluminum concentration was 199 µg/L and copper was 3.06 µg/L, whereas the CWQG limits for these metals are 100 µg/L and 2 µg/L, respectively.

#### **4.3.4 Roberts Outflow**

Water temperature of Roberts Outflow was measured daily between 27 July and 9 September 2003. Outflow temperatures fluctuated little during this period due to the moderating effect of Roberts Lake, located approximately 200 m upstream of the measurement site. Water temperatures ranged from 8 to 10°C (Figure 4.8 and Appendix C3).

#### **4.3.5 Little Roberts Outflow**

Water temperature of Little Roberts Outflow was measured daily between 28 July and 9 September 2003. Water temperature was warmest at the end of July, with the maximum recorded daily water temperature of 13.9°C on 30 July (Figure 4.9 and Appendix C3). Water temperatures steadily decreased until 10 August, when the mean daily water temperature reached 8.2°C. For the remainder of the month of August, mean daily water temperatures ranged from 8.2 to 9.8°C. As the result of warm weather at the beginning of September, water temperatures reached 10.3°C between 2 and 3 September. The lowest recorded water temperature during the sampling season was 7.5°C on 10 August in the early morning.

Where the CWQG have established limits for nutrients and other water quality constituents (e.g., metals), concentrations were within guideline limits. Water quality characteristics in the Little Roberts Outflow were similar to that of Little Roberts Lake, as well as to other streams sampled in 2003.

#### **4.3.6 Summary**

With the exception of the Tail Outflow, surface water quality in the streams sampled in 2003 was generally similar to that of the source lakes. The unnamed tributary to Roberts Lake differed from other streams sampled during the study, with most water quality constituents being present in higher concentrations than the other streams sampled in 2003. Aluminum and copper concentrations in this tributary exceeded the CWQG criteria.

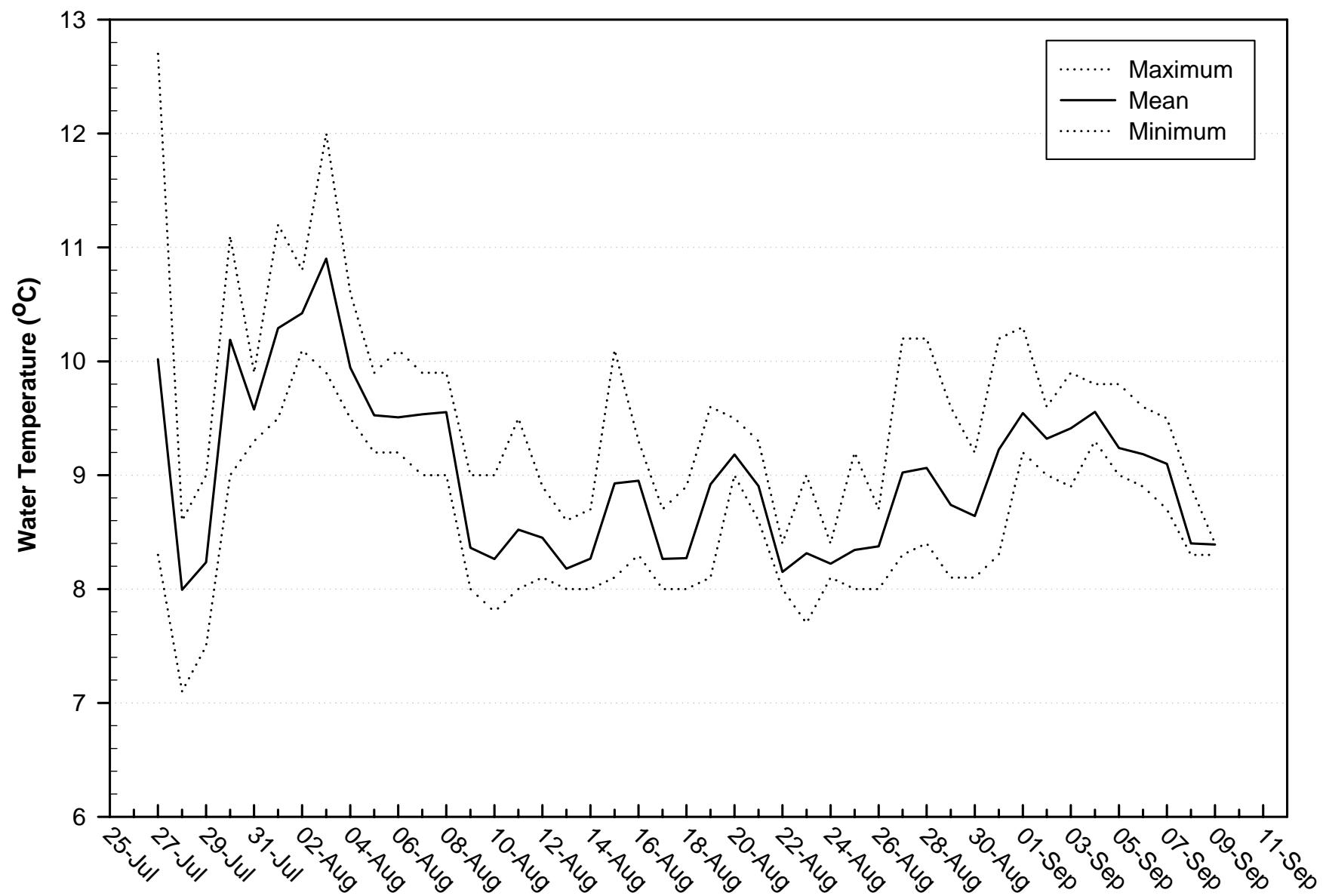


Figure 4.8 Daily water temperatures in Roberts Outflow, Doris North Project (July to September 2003).

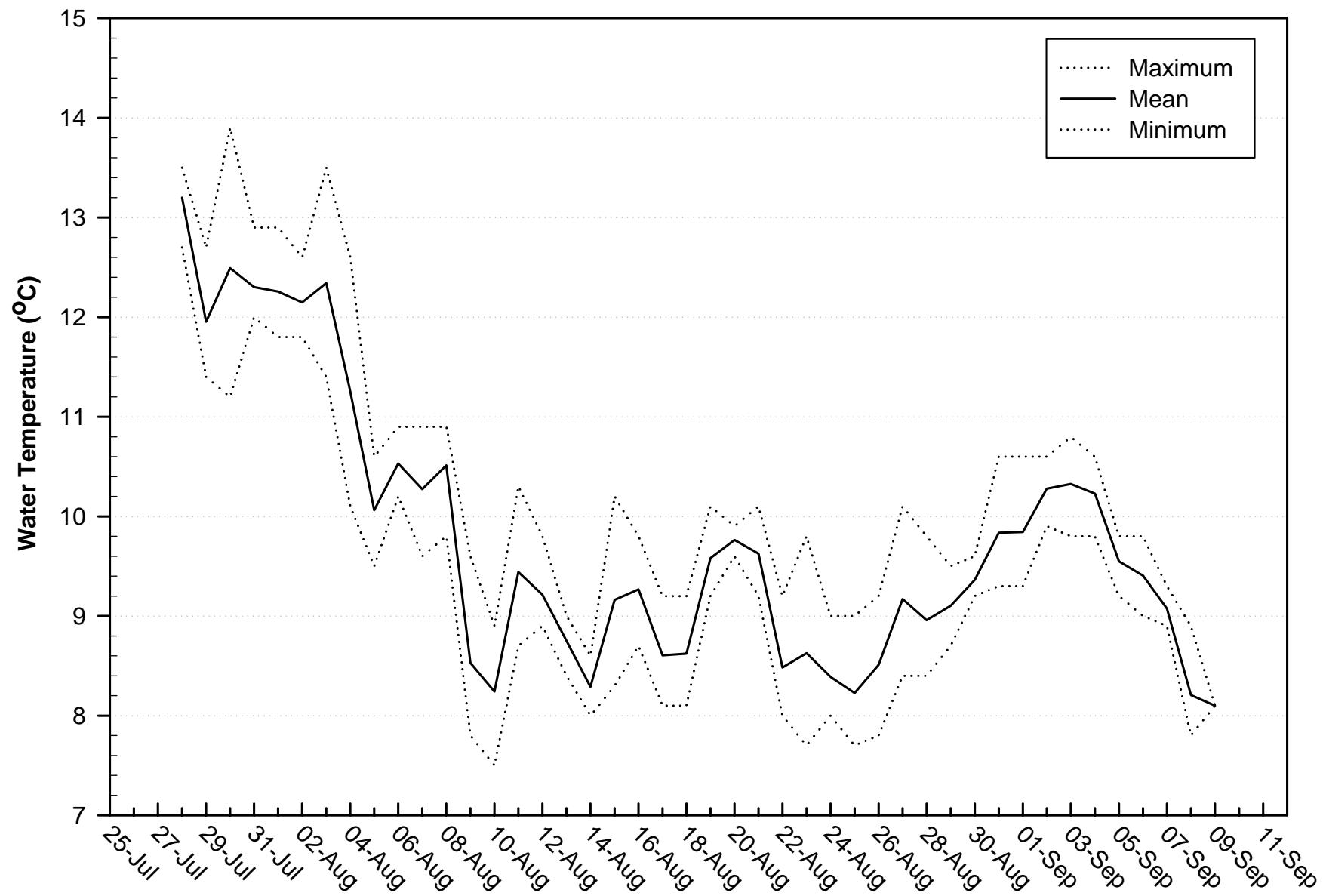


Figure 4.9 Daily water temperatures in Little Roberts Outflow, Doris North Project (July to September 2003).

## 5.0 FISH POPULATIONS

### 5.1 METHODS

Fish sampling was conducted in selected lakes and streams within the Doris North Project area based on data gaps identified during the Nunavut Impact Review Board (NIRB) pre-hearings in March 2003 and submission of the No Net Loss Plan (NNLP) to Department of Fisheries and Oceans (DFO) in January 2003. The specific objectives of the 2003 fisheries field program related to the fish population section included:

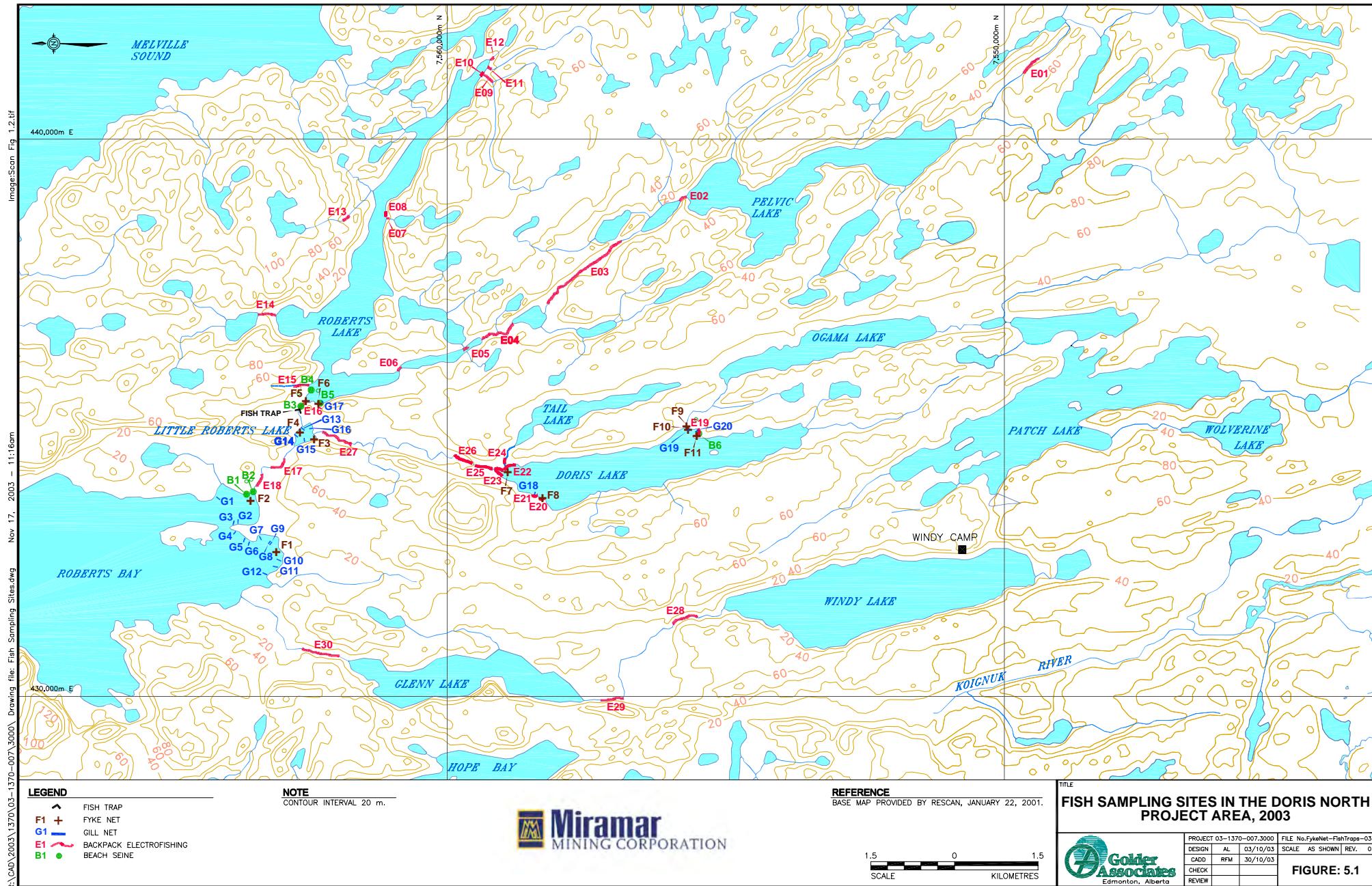
- continued monitoring of use of the Roberts Lake system by Arctic char;
- determining seasonal movement patterns in near-shore areas of Roberts Bay;
- assessing fish use of near-shore habitat in Doris, Roberts and Little Roberts lakes; and,
- initial scoping of potential fish collection sites for the design of the metal mining Environmental Effects Monitoring (EEM) program.

Figure 5.1 provides the fish sampling methods and locations during the 2003 program. Fish sampling in Roberts Outflow was conducted between Roberts Lake and Little Roberts Lake and involved a fish fence and trap, an Arctic fyke net, and backpack electrofishing. Fish sampling techniques used in Roberts Bay included a two-directional Arctic fyke net, gill nets, and beach seines. Small fish sampling was conducted in Roberts, Little Roberts, and Doris lakes using gill nets, a modified Arctic fyke net, beach seines, and backpack electrofishing. Selected streams were also sampled as part of the initial scooping for EEM; these included Tail Outflow, Doris Outflow, Little Roberts Outflow, Glenn Outflow, Pelvic Outflow, and Roberts Inflows.

#### 5.1.1 Life History Data Collection

Fish life history information was collected from all fish captured. Live fish were identified to species, measured (fork length to the nearest mm), and weighed (g). Fish larger than 300 mm in fork length were tagged with a uniquely numbered Hall Print™ tag to assess their movements through subsequent recaptures. Additional life history data were collected from fish that had succumbed during sampling; these included sex and maturity, reproductive status, and stomach contents.

To facilitate data recording and presentation of results, all captured fish were assigned a four-letter code. The common and scientific names of fish species captured in 2003, as well as their coded abbreviations, are presented in Table 5.1.



**Table 5.1 Common and scientific names of fish species captured in the Doris North Project Area, 2003.**

Family	Common name	Scientific name	Code
Salmonidae	Arctic char	<i>Salvelinus alpinus</i> (Linnaeus)	ARCH
	Lake trout	<i>Salvelinus namayacush</i> (Walbaum)	LKTR
	Lake whitefish	<i>Coregonus clupeaformis</i> (Mitchill)	LKWH
	Broad whitefish	<i>Coregonus nasus</i> (Pallas)	BRWH
	Cisco	<i>Coregonus artedi</i> Lesueur	CISC
	Least cisco	<i>Coregonus sardinella</i> Valenciennes	LSCS
Gasterosteidae	Ninespine stickleback	<i>Pungitius pungitius</i> (Linnaeus)	NNST
Gadidae	Saffron cod	<i>Eleginops gracilis</i> (Tilesius)	SFCD
	Greenland cod	<i>Gadus ogac</i> Richardson	GRCD
Cottidae	Fourhorn sculpin	<i>Myoxocephalus quadricornis</i> (Linnaeus)	FHSC
Pleuronectidae	Arctic flounder	<i>Liopsetta glacialis</i> (Pallas)	ARFL
	Longhead dab	<i>Limanda proboscidea</i> Gilbert	LNDB
Osmeridae	Capelin	<i>Mallotus villosus</i> (Muller)	CAPE
Clupeidae	Pacific herring	<i>Clupea harengus pallasi</i> (Valenciennes)	PCHR

### 5.1.2 Gill Net

Gill nets were set in Roberts, Little Roberts, and Doris lakes, and in Roberts Bay. Set gangs were comprised of either single panels of 1.9 cm or 8.9 cm (stretched mesh), and/or variable mesh size experimental gill nets. Each panel was 1.5 m deep by 15.2 m long. The nets were of the sinking type with mesh sizes ranging from 1.9 to 10.2 cm. The 1.9 cm mesh nets were used more frequently in Roberts, Little Roberts, and Doris lakes to target small fish. In Roberts Bay, gill nets consisted of variable mesh and panels of 8.9 cm mesh. Nets were generally checked every one to two hours to reduce capture mortality. Information recorded for individual gangs included the number and mesh size of net panels used, GPS coordinates, water depth and temperature, deployment and removal times, as well as life history data for all captured fish.

### 5.1.3 Fish Fence

A fish fence and trap was erected in Roberts Outflow to monitor the fall migration of Arctic char returning from the ocean to overwinter in Roberts Lake. This was installed on 6 August and removed on 8 September 2003. The fence consisted of two panels (each 3.1 m in length and 1.5 m in height) constructed of a metal frame with removable conduit rods (1.8 cm in diameter). The spacing between the rods was 1.9 cm. The panels were supported by wooden "A" frames and sandbagged into position. Upstream migrant fish were funnelled into a trap box located in mid-stream. The trap consisted of a metal frame (1.8 m long,

1.2 m wide, and 1.5 m high) perforated with holes for holding vertical conduit sections that formed the trap walls. The entrance to the trap consisted of a conduit funnel, similar in construction to the trap walls, allowing the opening width to be adjusted to maximize capture and minimize escape.

The fish fence was checked once or twice daily to monitor diurnal movement patterns. Information recorded during each trap check included water temperature, time of day, stream staff gauge, and life history data on captured upstream migrants. All captured fish were released immediately upstream of the fence.

#### **5.1.4 Fyke Net**

Arctic fyke nets and modified Arctic fyke nets were used to sample fish depending on the objective for each waterbody. In Roberts Bay and Roberts Outflow, the larger version of the fyke net was used to capture large fish, whereas the modified Arctic fyke net is designed to capture small fish; the smaller modified fyke net was used in Roberts, Little Roberts, and Doris lakes. Of the large version, each fyke net consisted of a trap 3.7 m long and 0.9 m wide, containing two throats (15 × 25 cm each), two 15 m wings, and a 15 m lead to shore. The nets were constructed of 1.27 cm dark grey knotless nylon mesh. Wings and lead were constructed of 2.54 cm dark grey knotless nylon and were 1.7 m deep. For the modified version, each fyke net consisted of a single trap net, two 7.6 m wings, and a 7.6 m lead to shore. The trap was 0.9 m long and 0.9 m wide, contained two throats (7.5 × 7.5 cm each), and was constructed of 1.0 cm dark grey knotless nylon mesh. Wings and lead were also constructed of 1.0 cm dark grey knotless nylon and were 0.9 m deep.

Fyke net sets were placed approximately 30 m off shore. A lead net panel was set perpendicular from shore and bisected the trap entrance. Wing net panels were attached to either side of the trap entrance and were stretched out parallel to shore. The combination of the lead panel and wings acted to confine and guide fish into the trap. Fyke nets were held in place by metal stakes driven into the ocean bed or lake bottom. The large fyke net is a two-way directional net, whereas the modified net does not provide directional catch data.

A fyke net was also used to sample for fish migrating up Roberts Outflow and successfully passing into Roberts Lake through a dense boulder garden. This fyke net was set up with two wings that stretched from the trap to shore. No centre lead was utilized. This arrangement functioned similarly to the fish fence trap, as it blocked off the entire stream channel and funnelled all upstream migrants into the trap.

Fyke nets were checked daily. During each fyke net check, trapped fish were removed from the trap and transferred to plastic tubs filled with water, and the trap was reset immediately. After the collection of life history data, the captured fish were released near the capture site. Other information recorded at each check included date, time, and water temperature.

### **5.1.5 Beach Seine**

Beach seining was conducted in Roberts Outflow, Roberts Lake, and Doris Lake, in areas of suitable substrate (i.e., fine or small substrate). The beach seine was 6.0 m long with a mesh size of 5 mm and was equipped with a collection bag. The length of each haul was recorded to determine catch-per-unit-effort. Similar to the other sampling methods, life history information was recorded and location, date, time, water temperature, and substrate type were also recorded.

### **5.1.6 Data Analysis**

Fish ageing was carried out according to MacKay et al. (1990). All data from individual fish were consolidated into one table (Appendix D1) and submitted to a thorough QA/QC procedure. The data were then used to calculate life history statistics that included:

- length-frequency distributions;
- length-weight relationships;
- mean, standard deviation, and range of length, weight, and condition factor data;
- size characteristics for separate sex and maturity categories; and,
- diet analyses.

As an index of relative abundance, catch-per-unit-effort (CPUE) values were calculated for each sampling method. Gill net CPUE values are reported as number of fish captured per 100 m<sup>2</sup> of each mesh size panel set for the equivalent of 24 hours. CPUE values for fyke net and fish fence catches are reported as number of fish captured per 24 hours of trap operation. Backpack electrofishing CPUE values are reported as number of fish per 100 seconds, and beach seining CPUE units are reported as number of fish per 100 m<sup>2</sup>.

## **5.2 LAKE COMMUNITIES**

### **5.2.1 DORIS LAKE**

The catch rates, size statistics, and stomach content data for fish species sampled in Doris Lake are summarized in Appendices D2 to D8; data from individual fish are presented in Appendix D1. Fish capture methods used in Doris Lake included fyke nets, gill nets, backpack electrofishing, and beach seines.

### 5.2.1.1 Species Composition and Relative Abundance

In total, 28 fish representing five species were captured in Doris Lake (Table 5.2). Ninespine stickleback was the predominant species in the overall catch (57%), followed by lake trout (18%) and lake whitefish (18%). Backpack electrofishing (54 min) along the shoreline accounted for most (43%) of the total catch. A considerable amount of effort was expended (Table 5.3) to capture small fish in Doris Lake; however, relatively few fish were captured.

**Table 5.2 Number of fish captured in Doris Lake, 2003.**

Capture Method	Lake trout	Lake whitefish	Least Cisco	Cisco	Ninespine Stickleback	Total
Fyke net	2	1			5	<b>8</b>
Gill net	2	3	1			<b>6</b>
Backpack electrofishing	1				11	<b>12</b>
Beach seine		1		1		<b>2</b>
<b>Total</b>	<b>5</b> (17.9%)	<b>5</b> (17.9%)	<b>1</b> (3.6%)	<b>1</b> (3.6%)	<b>16</b> (57.1%)	<b>28</b> (100.0%)

**Table 5.3 Overall catch-per-unit-effort (CPUE<sup>a</sup>) of fish captured in Doris Lake, 2003.**

Capture Method	Effort	Lake trout	Lake whitefish	Least Cisco	Cisco	Ninespine Stickleback	Total
Fyke net	591.1 h	0.08	0.04			0.20	<b>0.32</b>
Gill net (1.9 cm mesh)	164.1 h	0.51	1.04	0.80			<b>2.36</b>
Backpack electrofishing	3237 s	0.03				0.34	<b>0.37</b>
Beach seine	540 m <sup>2</sup>		0.19		0.19		<b>0.37</b>

<sup>a</sup> CPUE units: gill net=fish/100 m<sup>2</sup>/24 h; fyke net=fish/24 h; electrofishing=fish/100 s; beach seine=fish/100 m<sup>2</sup>.

### 5.2.1.2 Life History Data

#### *Lake Trout*

Five lake trout were captured in Doris Lake using a variety of sampling methods (Table 5.2). Fork lengths ranged from 276 to 725 mm, with a mean of 500 mm. Most lake trout were >495 mm in length and were likely adults. The mean condition factor for captured lake trout was 0.96, with a range of 0.81 to 1.09.

#### *Lake Whitefish*

Similar to lake trout, five lake whitefish were captured in Doris Lake using a variety of sampling methods (Table 5.2). Fork lengths ranged from 75 to

429 mm, with a mean of 260 mm. One lake whitefish (429 mm FL) was verified as a mature male in pre-spawning condition. The stomach of this fish was 30% full, with 5% isopods and 25% amphipods. The mean condition factor for captured lake whitefish was 1.36; condition factors for individual fish ranged from 1.06 to 1.57.

### ***Least Cisco***

One least cisco was captured in Doris Lake using gill nets. This fish was sexually immature and was 89 mm in fork length.

### ***Cisco***

One cisco was captured in Doris Lake using beach seines. This fish was sexually immature, with a fork length of 129 mm. The condition factor for this fish was 0.93.

### ***Ninespine Stickleback***

Ninespine stickleback ( $n=16$ ) were captured using fyke nets and backpack electrofishing in Doris Lake. These fish ranged in size from 20 to 89 mm in fork length and the mean length was 47 mm.

## **5.2.2 ROBERTS LAKE**

The catch rates, size statistics, and stomach content data for fish species sampled in Roberts Lake are summarized in Appendices D1 to D7; data from individual fish are presented in Appendix D10. Fish capture methods used in Roberts Lake included fyke nets, gill nets, backpack electrofishing, and beach seines.

### **5.2.2.1 Species Composition and Relative Abundance**

In total, eight fish representing three species were captured in Roberts Lake (Table 5.4). Arctic char was the predominant species in the overall catch (63%), followed by lake trout (25%), and ninespine stickleback (13%). Fyke nets accounted for most (63%) of the total catch. Similar to Doris Lake, a considerable amount of effort was expended (Table 5.5) to capture small fish in Roberts Lake; however, few small fish were captured.

**Table 5.4 Number of fish captured in Roberts Lake, 2003.**

Capture Method	Arctic char	Lake trout	Ninespine Stickleback	Total
Fyke net	3	1	1	5
Gill net	1	1		2
Backpack electrofishing	1			1
Beach seine				0
<b>Total</b>	<b>5</b> (62.5%)	<b>2</b> (25.0%)	<b>1</b> (12.5%)	<b>8</b> (100.0%)

**Table 5.5 Overall catch-per-unit-effort (CPUE<sup>a</sup>) of fish captured in Roberts Lake, 2003.**

Capture Method	Effort	Arctic char	Lake trout	Ninespine Stickleback	Total
Fyke net	91.6 h	0.79	0.26	0.26	1.31
Gill net	91.5 h	0.27	0.22		0.49
Backpack electrofishing	386 s	0.26			0.26
Beach seine	900 m <sup>2</sup>				0

<sup>a</sup> CPUE units: gill net=fish/100 m<sup>2</sup>/24 h; fyke net=fish/24 h; electrofishing=fish/100 s; beach seine=fish/100 m<sup>2</sup>.

### 5.2.2.2 Life History Data

#### *Arctic Char*

The five Arctic char encountered in Roberts Lake were all immature and were likely rearing in Roberts Lake or nearby stream habitats. Fork lengths ranged from 90 to 165 mm, with a mean length of 133 mm.

#### *Lake Trout*

Only two lake trout were captured in Roberts Lake. One fish was immature with a fork length of 195 mm, and the other lake trout was mature and had a fork length of 635 mm.

#### *Ninespine Stickleback*

One ninespine stickleback was captured in Roberts Lake in the fyke net. This fish had a fork length of 50 mm.

### 5.2.3 LITTLE ROBERTS LAKE

Fyke netting and gill netting were conducted in Little Roberts Lake to supplement information on small fish use of this lake. The catch rates, size statistics, and stomach content data for fish species sampled in Little Roberts Lake are summarized in Appendices D2 to D8; data from individual fish are presented in Appendix D1.

#### 5.2.3.1 Species Composition and Relative Abundance

In total, 37 fish, representing five species, were captured in Little Roberts Lake (Table 5.6). Ninespine stickleback ( $n=20$ ) was the predominant species that contributed 54% to the total catch. Arctic char ( $n=7$ ), lake trout ( $n=6$ ), least cisco ( $n=3$ ), and cisco ( $n=1$ ) were also captured. Gill netting captured the greatest diversity of fish (four species). Similar to Doris and Roberts lakes, relatively few small fish were captured, although sampling effort was high (Table 5.7).

**Table 5.6 Number of fish captured in Little Roberts Lake, 2003.**

Capture Method	Arctic char	Lake trout	Cisco	Least Cisco	Ninespine Stickleback	Total
Fyke net	4	2			20	26
Gill net	3	4	1	3		11
<b>Total</b>	<b>7</b> (18.9%)	<b>6</b> (16.2%)	<b>1</b> (2.7%)	<b>3</b> (8.1%)	<b>20</b> (54.1%)	<b>37</b> (100.0%)

**Table 5.7 Overall catch-per-unit-effort (CPUE<sup>a</sup>) of fish captured in Little Roberts Lake, 2003.**

Capture Method	Effort	Arctic char	Lake Trout	Cisco	Least Cisco	Ninespine Stickleback	Total
Fyke net	194.3 h	0.49	0.25			2.47	3.21
Gill net	480.9 h	0.82	1.05	0.26	0.87		3.01

<sup>a</sup> CPUE units: gill net=fish/100 m<sup>2</sup>/24 h; fyke net=fish/24 h.

#### 5.2.3.2 Life History Data

##### *Arctic Char*

Arctic char captured in Little Roberts Lake ( $n=7$ ) ranged from 94 to 248 mm in fork length (mean of 136 mm). All fish were immature. The mean condition factor of these fish was 1.09; condition factors for individual fish ranged from 0.96 to 1.20.

### ***Lake Trout***

Six lake trout were captured in Little Roberts Lake; four were captured in the gill nets and two in the fyke net. Fork lengths ranged from 104 to 445 mm, with a mean of 276 mm. Two of these fish were marked with external tags and released back into the lake. A third fish (fork length of 382 mm), which was originally tagged in Doris Outflow below the waterfall (Site E26) on 20 August, was recaptured in Little Roberts Lake on 28 August.

### ***Least Cisco***

Three least cisco were captured in Little Roberts Lake using gill nets. Fork lengths ranged from 121 to 143 mm, with a mean of 135. One fish (143 mm FL) caught on 1 September was a mature male in pre-spawning condition and its stomach was empty.

### ***Cisco***

One cisco was captured in a gill net. This fish had a fork length of 199 mm.

### ***Ninespine Stickleback***

Ninespine stickleback ( $n=20$ ) in Little Roberts Lake ranged from 51 to 74 mm in fork length, with a mean of 63 mm.

## **5.3 STREAM COMMUNITIES**

Most streams described in the following sections were sampled as part of the initial scoping for the Metal Mining Environmental Effects Monitoring (EEM) program.

The catch rates, size statistics, and stomach content data for fish species sampled in streams are summarized in Appendices D2 to D10; data from individual fish are presented in Appendix D1. Fish in the stream communities were captured using backpack electrofishing.

### **5.3.1 Doris Outflow**

#### **5.3.1.1 Species Composition and Relative Abundance**

In total, 28 fish representing three species were captured in Doris Outflow (Table 5.8). Lake trout and ninespine stickleback were the two dominant species captured ( $n=12$  and 11, respectively); Arctic char ( $n=5$ ) were also captured. Three sections of Doris Outflow were sampled: above the waterfall, below the waterfall, and at the downstream end of Doris Outflow near Little Roberts Lake

(Table 5.8). Lake trout and ninespine stickleback were captured at all locations. All Arctic char were captured below the waterfall.

**Table 5.8 Catch, species composition, and catch-per-unit-effort (CPUE<sup>a</sup>) data for fish captured by backpack electrofishing in Doris Outflow, 2003.**

Location	Effort (s)	Arctic char		Lake trout		Ninespine Stickleback		Total	
		n	CPUE	N	CPUE	n	CPUE	n	CPUE
Above the waterfall (Site E25)	1040			5	0.48	4	0.38	9	0.87
Below the waterfall (Site E26)	500	5	1.00	6	1.20	1	0.20	12	2.40
Downstream end of Doris Outflow (Site E27)	586			1	0.17	6	1.02	7	1.19
<b>Total for all sites combined</b>	<b>2126</b>	<b>5</b>	<b>0.24</b>	<b>12</b>	<b>0.56</b>	<b>11</b>	<b>0.52</b>	<b>28</b>	<b>1.32</b>

<sup>a</sup> CPUE units = fish/100 s.

### 5.3.1.2 Life History Data

#### *Arctic Char*

Of the five Arctic char caught in Doris Outflow, all were immature and were likely rearing in this stream. Fork lengths ranged from 107 to 266 mm, with a mean length of 195 mm. The mean condition factor was 1.27 (range of 1.12 to 1.43).

#### *Lake Trout*

Of the 12 lake trout captured in Doris Outflow, one fish was a young-of-the-year (YOY). This fish had a fork length of 38 mm and was captured in the downstream section of Doris Outflow. The remaining fish had fork lengths that ranged from 320 to 692 mm, with a mean of 444 mm and a mean condition factor of 1.27 (range of 0.91 to 1.68).

#### *Ninespine Stickleback*

Ninespine stickleback ( $n=11$ ) in Doris Outflow ranged from 20 to 76 mm in fork length, with a mean of 51 mm.

### 5.3.2 Tail Outflow

Ninespine stickleback were the only species captured in Tail Outflow ( $n=10$ ). This species had fork lengths that ranged from 44 to 81 mm (mean of 61 mm). Backpack electrofishing CPUE for ninespine stickleback in Tail Outflow was 8.85 fish/100 s.

### 5.3.3 ROBERTS OUTFLOW

#### 5.3.3.1 Species Composition and Relative Abundance

In total, 543 fish representing six species were caught in Roberts Outflow during August and September 2003 (Table 5.9). Arctic char was the predominant species in the overall catch (88.2%), followed by lake trout (7.9%).

**Table 5.9 Number of fish captured and recaptured in Roberts Outflow, 2003.**

Species	Fish Fence	Fyke Net	Electrofishing	Beach Seine	Dip Net	Total
<b>2003 Initial Captures</b>						
Arctic char	289	138	48	4		479
Lake trout	29	7	3	4		43
Broad whitefish	2					2
Cisco	2				1	3
Least cisco	1	6			1	8
Ninespine stickleback			8			8
<b>Total</b>	<b>323</b>	<b>151</b>	<b>59</b>	<b>8</b>	<b>2</b>	<b>543</b>
<b>Recaptures during 2003</b>						
Arctic char		206			2	208
Lake trout	2	25				27
Broad whitefish		1				1
Cisco						
Least cisco						
Ninespine stickleback						
<b>Total</b>	<b>2</b>	<b>232</b>			<b>2</b>	<b>236</b>
<b>Recaptures from previous years (i.e., 2000 and 2002)</b>						
Arctic char	16	1		1		18
Lake trout	4	1		1		6
Broad whitefish						
Cisco						
Least cisco						
Ninespine stickleback						
<b>Total</b>	<b>20</b>	<b>2</b>		<b>2</b>		<b>24</b>

Different sampling sites located along the length of the outflow resulted in recaptures of some fish as they migrated upstream. In total, 234 fish were recaptured in the upstream fyke net; these included 207 Arctic char, 26 lake trout, and one broad whitefish.

#### *Fish Fence*

In total, 323 fish were captured at the fish fence. Most were Arctic char (89%), followed by lake trout (9%). During the 31 days that the fish fence was

employed, there were only three days that Arctic char were not captured (8 and 9 August and 6 September). The number of Arctic char entering the trap on a daily basis varied greatly (Figure 5.2). On most days, the number of fish generally did not exceed 18 fish, with the exception of two days. On those two days, 66 Arctic char were captured on 12 August, and 21 Arctic char were captured on 16 August. The number of recaptures from previous years (i.e., 2002) accounted for 5.5% of the Arctic char catch ( $n=16$ ).

#### *Fyke Net*

The fyke net was set upstream of the fish fence to determine the number of fish that migrated through the dense boulder garden from the fish fence. The 2003 open-water period was a high flow year, and the majority of fish managed to pass through the boulder garden (65%). There were also 151 fish that were initially captured in the fyke net that were not captured in the fish fence. These fish were primarily small Arctic char ( $n=121$ ,  $<300$  mm FL) and were likely using the boulder garden for rearing purposes.

Of the fish captured in the fyke net that were not captured in the fish fence, Arctic char was the most common species encountered, contributing 91.4% to the total catch. These Arctic char ( $n=138$ ) ranged from 87 to 359 mm in fork length. The mean fork length (233 mm) was considerably smaller than the mean fork lengths of fish captured in the fish fence trap (648 mm).

#### **5.3.3.2 Life History Data**

##### *Arctic Char*

###### *Size Distribution*

The length distribution of individual Arctic char captured in Roberts Outflow ( $n=475$ ; all methods combined) was widespread, ranging from 53 to 893 mm in fork length (mean of 479 mm). Most of these fish (62% of the catch) were larger than 250 mm in fork length; these were primarily adults migrating from the marine environment into Roberts Lake. Arctic char smaller than 250 mm in fork length were likely juveniles undergoing localized movements between fresh water habitats (e.g., between Roberts and Little Roberts lakes).

Of the fish captured at the fish fence, the length-distribution pattern exhibited two categories of sizes (Figure 5.3). The smallest mode was composed of fish between 250 and 580 mm in fork length; fish with fork lengths less than 400 mm were likely juveniles. The largest mode was composed of fish between 590 and 890 mm, which were likely adult Arctic char. Length frequencies were also separated by time (Figure 5.3). During the initial spawning migration, only large Arctic char were captured (7 to 17 August); the mean length of these fish was

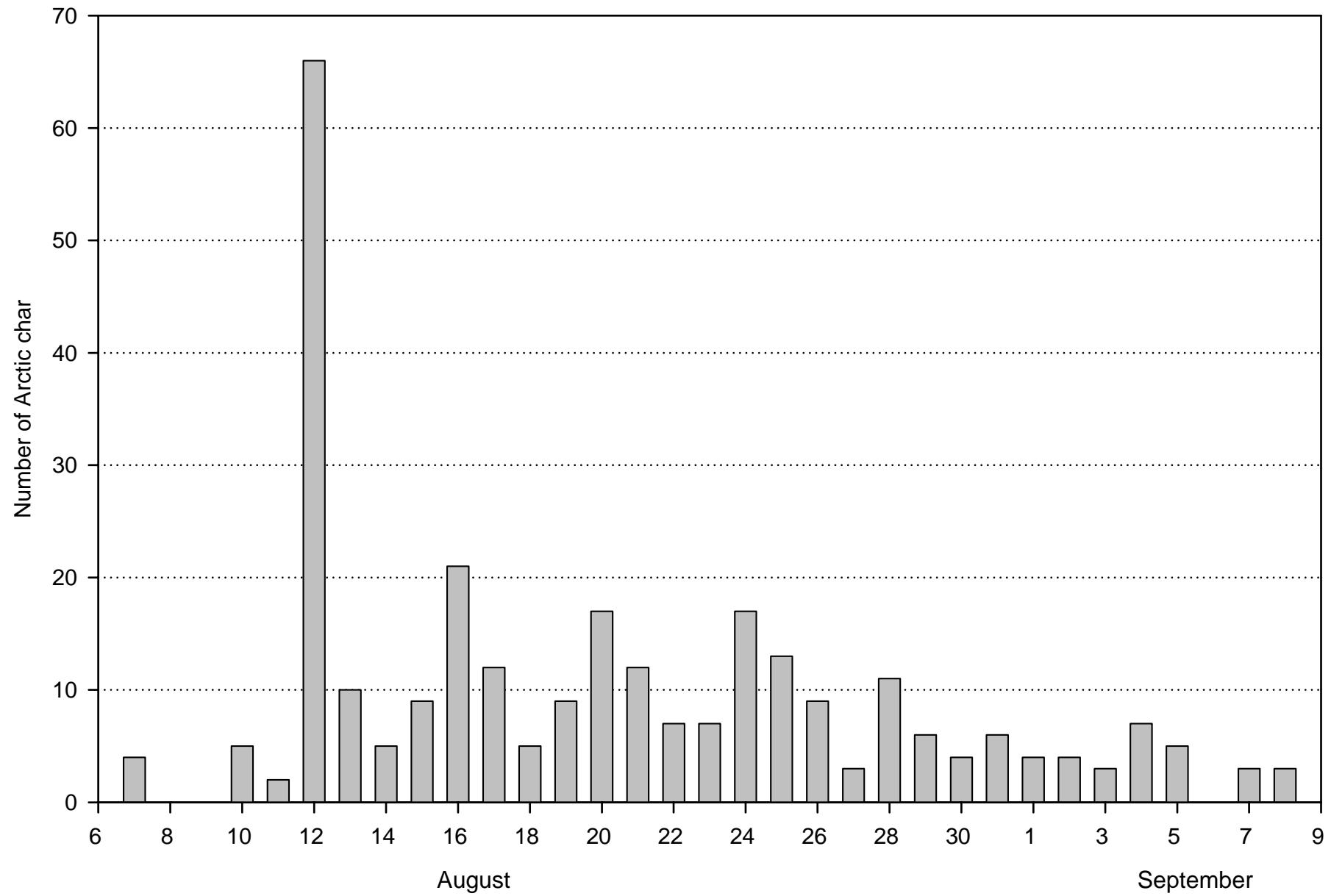


Figure 5.2 Daily catches of Arctic char in the fish fence at Roberts Outflow, 2003

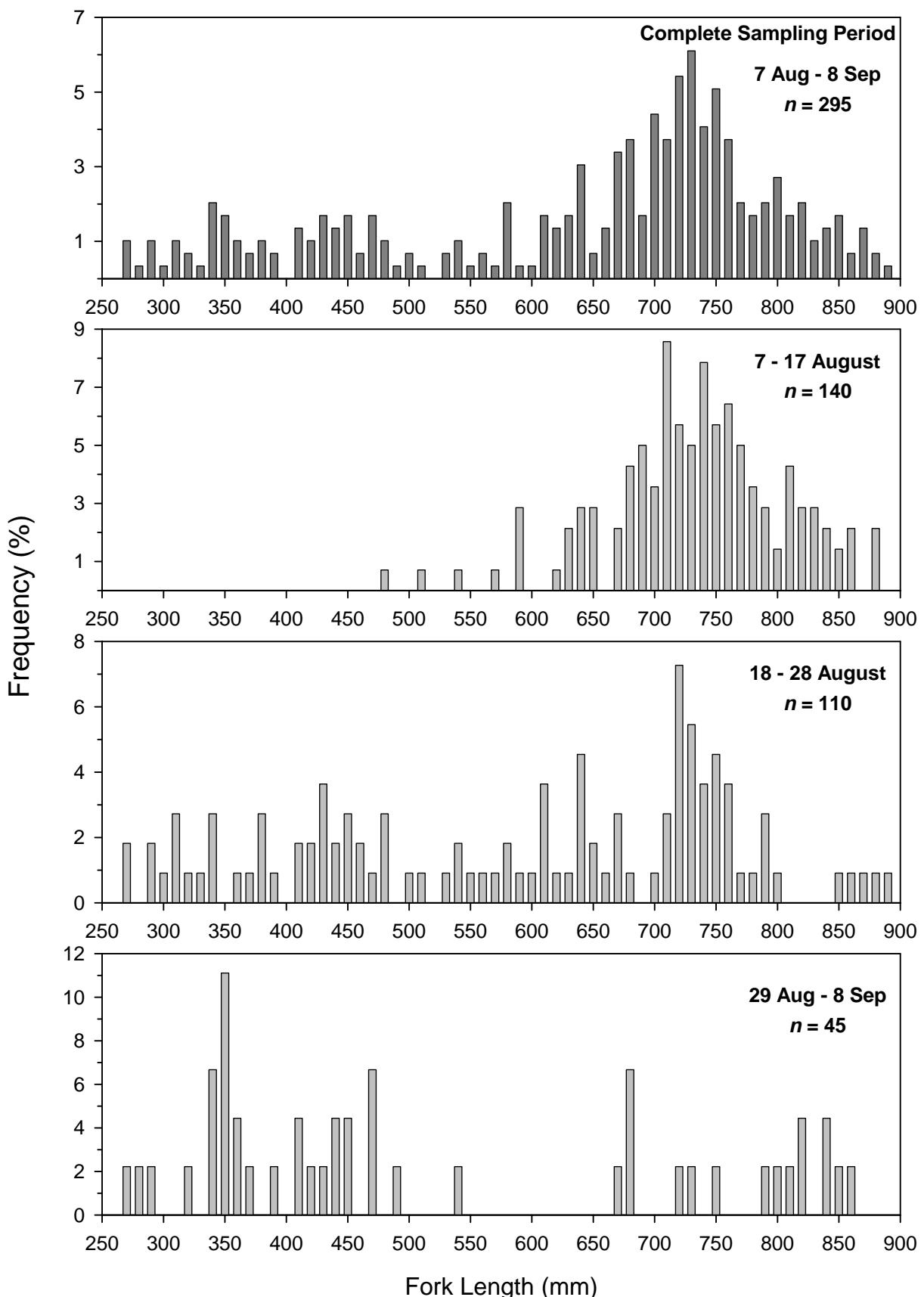


Figure 5.3 Temporal changes in length-frequency distribution of Arctic char, captured at the fish fence in Roberts Outflow, 2003 (note changes in y-axis). Note: six Arctic char captured upstream of fence on 7 August via beach seine or backpack electrofishing are included in distribution.

728 mm (n=140). During 18 to 28 August, there was a diverse range in Arctic char sizes, with fork lengths ranging from 270 to 890 mm and a mean length of 592 mm (n=110). During 29 August to 8 September, Arctic char were within the 270 to 490 mm size-class and the 670 to 860 mm size-class; mean fork length was 529 mm (n=45).

#### *Length-Weight Relationship*

The length-weight regression equation for Arctic char captured in Roberts Outflow (Appendix D11) was:

$$\log \text{Weight (g)} = -5.113 + 3.057 \log \text{Fork Length (mm)} \quad (n=441; r^2=0.996)$$

or  $W = 7.7090 \times 10^{-6} * L^{3.057}$

The mean condition factor was 1.10; condition factors for individual fish ranged from 0.68 to 1.47.

#### *Sex and Maturity*

Sex (based on external characteristics) was determined for 385 Arctic char. Of those, 246 were females and 139 were males (Appendix D1). Maturity was determined only for fish that had succumbed during sampling. In total, maturity was determined for 12 fish, of which seven were females and five were males. Of the females, one was immature and the other six were mature; however, only one of those fish was gravid. Of the males, one was immature and the other four were mature. In 2002, mature females ranged from 8 to 13 years in age, whereas one immature female was five years old. This suggested that sexual maturity in females is reached between ages 6 and 8. Mature males ranged from 8 to 12 years in age. Based on this and the capture of two immature males that were four years old, sexual maturity in males is reached between ages 5 and 8.

Results from other studies of Arctic char populations indicated that a large proportion of spawning fish do not migrate to sea in the year that they spawn (Grainger 1953; Moore 1975a, 1975b; Johnson 1980; Moshenko et al. 1984; RL&L 1998). The presence of only a small number of current year spawners (six females and four males) within the fish fence catch in 2003 was consistent with the previous studies.

#### *Diet*

Five stomachs were examined from Arctic char collected from Roberts Outflow. Three of the stomachs were empty. The mean fullness of stomachs containing food was 28%. For the fish with stomach contents, the diet consisted of chironomids (93% of total food volume) and fish row (7%; Appendix D8). The fish with row (10 eggs) in its stomach was captured on 10 August at Site E16a.

### ***Lake Trout***

#### *Size Distribution*

Lake trout caught in Roberts Outflow ( $n=43$ ) ranged from 94 to 787 mm in fork length (mean of 452 mm). Most (86%) of the catch was comprised of fish between 350 and 500 mm in fork length, with only 9% of the captured lake trout exceeding 600 mm in fork length (Figure 5.4).

#### *Length-Weight Relationship*

The length-weight regression equation for lake trout caught in Roberts Outflow (Appendix D12) was:

$$\log \text{Weight (g)} = -4.866 + 2.963 \log \text{Fork Length (mm)} \quad (n=42; r^2=0.964)$$

$$\text{or} \quad W = 1.3614 \times 10^{-5} * L^{2.963}$$

The mean condition factor was 1.10; condition factors for individual fish ranged from 0.75 to 1.39 (Appendix D7).

### ***Broad Whitefish***

Two broad whitefish were captured in Roberts Outflow. Fork lengths were 306 and 511 mm. The mean condition factor was 1.43; condition factors for individual fish were 1.24 and 1.62 (Appendix D7).

### ***Cisco***

Three cisco were captured in Roberts Outflow. The mean fork length was 264 mm (range of 190 to 362 mm). One of these fish (FL=362 mm) was a mature female but seasonally undeveloped. The mean condition factor was 1.12; condition factors for individual fish ranged from 0.95 to 1.24 (Appendix D7).

### ***Least Cisco***

Eight least cisco were captured in Roberts Outflow. Fork lengths ranged from 192 to 238 mm. One of these fish (FL=235 mm) was a mature female with fully developed ovaries for the 2003 spawning season. The mean condition factor was 1.05; condition factors for individual fish ranged from 0.97 to 1.08 (Appendix D7).

### ***Ninespine Stickleback***

Ninespine stickleback ( $n=8$ ) in Roberts Outflow ranged from 25 to 40 mm in fork length, with a mean of 33 mm.

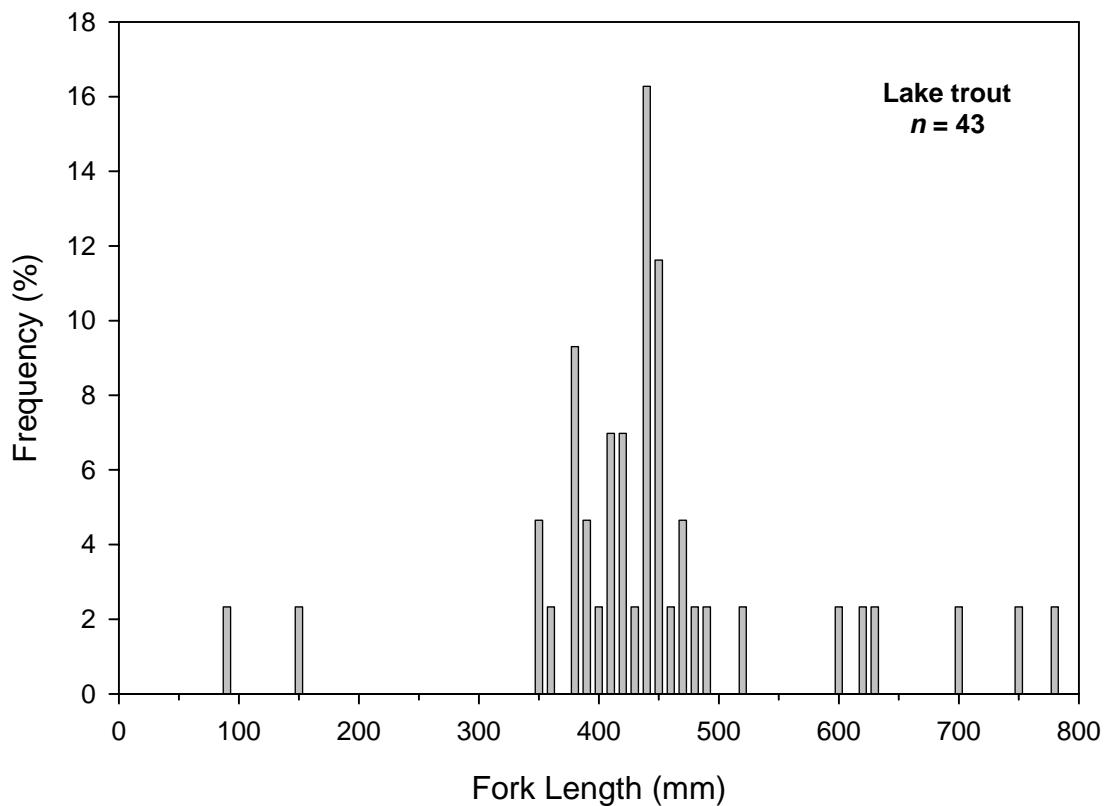


Figure 5.4 Length-frequency distribution of lake trout captured by various methods in Roberts Outflow, 2003.

### 5.3.4 Roberts Lake Tributaries

#### 5.3.4.1 Species Composition and Relative Abundance

Seven tributaries flowing into Roberts Lake were sampled; of these, fish were captured in three (Table 5.10). In total, 59 fish representing three species were captured. Arctic char was the dominant species ( $n=34$ ). Lake trout ( $n=8$ ) and ninespine stickleback ( $n=17$ ) were also captured. The overall backpack electrofishing CPUE was 2.75 fish/100s.

**Table 5.10 Catch, species composition, and catch-per-unit-effort (CPUE<sup>a</sup>) data for fish captured by backpack electrofishing in Roberts Lake tributaries, 2003.**

Location	Effort (s)	Arctic char		Lake trout		Ninespine Stickleback		Total	
		n	CPUE	n	CPUE	n	CPUE	n	CPUE
Tributary E07	11								
Tributary E09	513			6	1.17			<b>6</b>	1.17
Tributary E11	183	1	0.55					<b>1</b>	0.55
Tributary E12	39								
Tributary E13	201								
Tributary E14	820	33	4.02	2	0.24	17	2.07	<b>52</b>	6.34
Tributary E15	381								
<b>Total for all sites combined</b>	<b>2148</b>	<b>34</b>	<b>1.58</b>	<b>8</b>	<b>0.37</b>	<b>17</b>	<b>0.79</b>	<b>59</b>	<b>2.75</b>

<sup>a</sup> CPUE units = fish /100 s.

#### 5.3.4.2 Life History Data

##### *Arctic Char*

The Arctic char ( $n=34$ ) captured in the tributaries of Roberts Lake were YOY and immature fish and were likely rearing in these streams. Fork lengths ranged from 48 to 119 mm, with a mean length of 82 mm.

##### *Lake Trout*

Eight lake trout were captured in Roberts Lake tributaries and all fish were YOY and immature. These fish were likely rearing in these streams. The mean fork length was 95 mm and the range was 64 to 128 mm.

##### *Ninespine Stickleback*

Ninespine stickleback ( $n=17$ ) in Roberts Lake tributaries ranged from 10 to 59 mm in fork length, with a mean of 30 mm.

### 5.3.5 Little Roberts Outflow

#### 5.3.5.1 Species Composition and Relative Abundance

Overall, few fish were captured in Little Roberts Outflow. Backpack electrofishing was conducted for 1781 seconds over a 600 m length of stream. In total, 13 fish representing three species were captured. Eleven ninespine stickleback were captured, one Arctic char, and one fourhorn sculpin. Fourhorn sculpin are generally a marine species but this fish was captured in the lower end of Little Roberts Outflow near the marine environment. The overall backpack electrofishing CPUE was 0.73 fish/100 s (Appendix D5).

#### 5.3.5.2 Life History Data

The one Arctic char captured was a juvenile and had a fork length of 126 mm. The fourhorn sculpin was also likely a juvenile and had a fork length of 95 mm. Ninespine stickleback ranged in size from 30 to 66 mm (fork length) and their mean length was 53 mm.

### 5.3.6 Glenn Outflow

#### 5.3.6.1 Species Composition and Relative Abundance

Overall, few fish were captured in Glenn Outflow. Backpack electrofishing was conducted for 1382 seconds over a 600 m length of stream near Glenn Lake. In total, 15 fish were captured, of which eight were Arctic char and seven were lake trout. The overall backpack electrofishing CPUE was 1.09 fish/100 s (Appendix D5).

#### 5.3.6.2 Life History Data

Arctic char ranged in length from 183 to 295 mm (fork length) and their mean length was 227 mm. The lake trout had fork lengths that ranged from 181 to 515 mm, with a mean of 283 mm.

### 5.3.7 Pelvic Drainage Tributaries

#### 5.3.7.1 Species Composition and Relative Abundance

Pelvic Lake inflow and outflows were sampled using backpack electrofishing. The only species encountered in Pelvic Inflow was ninespine stickleback ( $n=11$ ); however, a diverse array of fish species was documented in Pelvic Outflow. In total, 80 fish were captured in Pelvic Outflow representing six species (Table 5.11). Ninespine stickleback was the dominant species ( $n=31$ ), followed by lake trout ( $n=15$ ), Arctic char ( $n=13$ ), and least cisco ( $n=13$ ). Cisco and lake

whitefish were also encountered. The overall backpack electrofishing CPUE was 1.25 fish/100 s.

**Table 5.11 Catch, species composition, and catch-per-unit-effort (CPUE<sup>a</sup>) data for fish captured by backpack electrofishing in Pelvic Outflow, 2003.**

Arctic char		Lake trout		Lake whitefish		Cisco		Least Cisco		Ninespine Stickleback		Total	
n	CPUE	n	CPUE	N	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE
13	0.20	15	0.23	6	0.09	2	0.03	13	0.20	31	0.48	80	1.25

<sup>a</sup> CPUE units = fish/100 s; total effort = 5859 s.

### 5.3.7.2 Life History Data

#### *Arctic Char*

Arctic char captured in Pelvic Outflow ( $n=13$ ) ranged from 124 to 250 mm in fork length (mean of 167 mm). All fish were immature. The mean condition factor of these fish was 0.98 (range of 0.70 to 1.20).

#### *Lake Trout*

Lake trout ( $n=13$ ) captured in Pelvic Outflow had fork lengths that ranged from 298 to 642 mm, with a mean of 420 mm. Thirteen of these fish were marked with external tags and released back into the stream. Three of these fish were ripe males that had milt extruding upon touch during sampling on 1 September. These fish had fork lengths of 430, 437, and 454 mm. The mean condition factor of captured lake trout was 1.03 (range of 0.89 to 1.18).

#### *Lake Whitefish*

Lake whitefish ( $n=6$ ) captured in Pelvic Outflow had fork lengths that ranged from 223 to 410 mm, with a mean of 330 mm. The mean condition factor was 1.12 (range of 0.69 to 1.28).

#### *Least Cisco*

Least cisco ( $n=13$ ) captured in Pelvic Outflow had fork lengths that ranged from 161 to 240 mm, with a mean of 206 mm. These fish were likely all mature. The mean condition factor was 0.95 (range of 0.61 to 1.18).

#### *Cisco*

Two cisco were captured during backpack electrofishing. Fork lengths were 246 and 260 mm. The mean condition factor was 1.01.

### ***Ninespine Stickleback***

Ninespine stickleback ( $n=31$ ) in Pelvic Outflow ranged from 10 to 59 mm in fork length, with a mean of 30 mm. Of the ninespine stickleback that were captured in Pelvic Inflow ( $n=11$ ), fork lengths ranged from 20 to 27 mm (mean of 24 mm).

## **5.4 ROBERTS BAY**

Fish use of near-shore habitats in Roberts Bay was assessed using fyke nets and gill nets. A fyke net was installed at two locations in the bay; these locations included at the proposed jetty on the west side of the bay (Site F1) and at the mouth of Little Roberts Outflow (Site F2; Figure 1.2). Gill nets ( $n=12$ ) were set throughout the bay using primarily variable mesh and some 8.9 cm mesh ( $n=4$ ).

The catch rates, length-frequency distributions, size statistics, and diet data for fish species sampled in Roberts Bay are summarized in Appendices D2 to D8; data from individual fish are presented in Appendix D1.

### **5.4.1 Species Composition and Relative Abundance**

In total, 4534 fish representing 11 species were captured in Roberts Bay during July and August 2003 (Table 5.12). Capelin was the predominant species in the overall catch (57.9%), followed by saffron cod (37.8%) and Arctic flounder (2.5%). All other species accounted for <2% of the total catch. It should be noted that capelin were only captured during a two day period at the end of July.

Species diversity and composition differed between the two basins of Roberts Bay (Table 5.12). In the west basin, 11 fish species were encountered, whereas in the east basin, seven fish species were documented. In the west basin, capelin was the dominant species (69.1%), followed by saffron cod (28.5%), whereas in the east basin, capelin was not captured and saffron cod was by far the dominant species (86.2%).

Differences in relative abundance were also noted between the two basins. During fyke netting, Arctic flounder, saffron cod, and fourhorn sculpin had considerably higher CPUEs in the east basin than in the west basin (Table 5.13). Due to the large number of capelin captured, the overall CPUE of the west basin was considerably higher than the east basin (254.67 and 155.03 fish/24h, respectively).

During gill netting, the overall relative abundance was higher in the west basin than in the east basin (12.34 and 1.05 fish/100m<sup>2</sup>/24h, respectively). This was primarily attributed to the large numbers of saffron cod captured in the west

basin ( $n=1715$ ); each of the other species captured had CPUEs of less than 1 fish/100m<sup>2</sup>/24h.

**Table 5.12 Numbers and percent composition of fish captured in the east and west basins of Roberts Bay, 2003.**

Species	West Basin <sup>a</sup>		East Basin <sup>b</sup>		Total	
	N	%	n	%	n	%
Arctic char	16	0.4	9	1.2	25	0.6
Lake trout	14	0.4			14	0.3
Cisco	6	0.2	1	0.1	7	0.2
Least Cisco	2	0.1			2	0.0
Arctic flounder	41	1.1	71	9.7	112	2.5
Saffron cod	1084	28.5	631	86.2	1715	37.8
Greenland cod	1	0.0	2	0.3	3	0.1
Capelin	2627	69.1			2627	57.9
Fourhorn sculpin	7	0.2	15	2.0	22	0.5
Longhead dab	1	0.0			1	0.0
Pacific Herring	3	0.1	3	0.4	6	0.1
Total	3802	100.0	732	100.0	4534	100.0

<sup>a</sup> includes fyke net site F1 and gill net sites G5 to G12

<sup>b</sup> includes fyke net site F2, gill net sites G1 to G4, and beach seine sites B1 and B2.

**Table 5.13 Catch-per-unit-effort (CPUE) data for fish captured using fyke nets and gill nets in Roberts Bay, 2003.**

Species	Fyke Net (fish/24h)		Gill Net (fish/100m <sup>2</sup> /24h)	
	West Basin (Site F1)	East Basin (Site F2)	West Basin (Sites G5 to G12)	East Basin (Sites G1 to G4)
Arctic char	0.62	108.40	0.37	0.32
Lake trout	0.97			
Cisco	0.28	0.22	0.03	
Least Cisco	0.14			
Arctic flounder	2.36	15.28	0.75	0.11
Saffron cod	67.84	138.42	10.73	0.32
Greenland cod	0.07			0.11
Capelin	182.04			
Fourhorn sculpin	0.28	1.11	0.32	0.07
Longhead dab	0.07			
Pacific Herring			0.14	0.13
Total	254.67	155.03	12.34	1.05

## 5.4.2 Life History Data

### *Arctic Char*

#### *Size Distribution*

Arctic char ( $n=25$ ) captured in the fyke nets in Roberts Bay had fork lengths that ranged from 179 to 838 mm, with a mean of 514 mm. The length-distribution did not exhibit any patterns. Lengths were evenly distributed and none of the frequencies exceeded 8%. The size categories that had the highest frequencies were 180, 630, 710, and 830 mm (Figure 5.5).

#### *Length-Weight Relationship*

The length-weight regression equation for Arctic char captured in Roberts Bay (Appendix D13) was:

$$\log \text{Weight (g)} = -5.208 + 3.087 \log \text{Fork Length (mm)} \quad (n=23; r^2=0.992)$$

$$\text{or} \quad W = 6.1944 \times 10^{-6} * L^{3.087}$$

The mean condition factor was 1.07; condition factors for individual fish ranged from 0.78 to 1.28.

#### *Sex and Maturity*

Of the Arctic char captured, eight females were identified and six males; all were mature except two females.

#### *Diet*

Five stomachs were examined and all of them had prey items present. Mean fullness was 54%, and the contents consisted of 80% capelin and 20% unidentified fish remains.

### *Lake Trout*

Lake trout ( $n=14$ ) captured in Roberts Bay had fork lengths that ranged from 318 to 908 mm, with a mean of 572 mm. Lengths were evenly distributed and there was no dominant size category (Figure 5.5). The mean condition factor for captured lake trout was 1.07, with a range of 0.82 to 1.22.

### *Least Cisco*

Two least cisco were captured in the west basin of Roberts Bay. These fish had fork lengths of 78 and 203 mm.

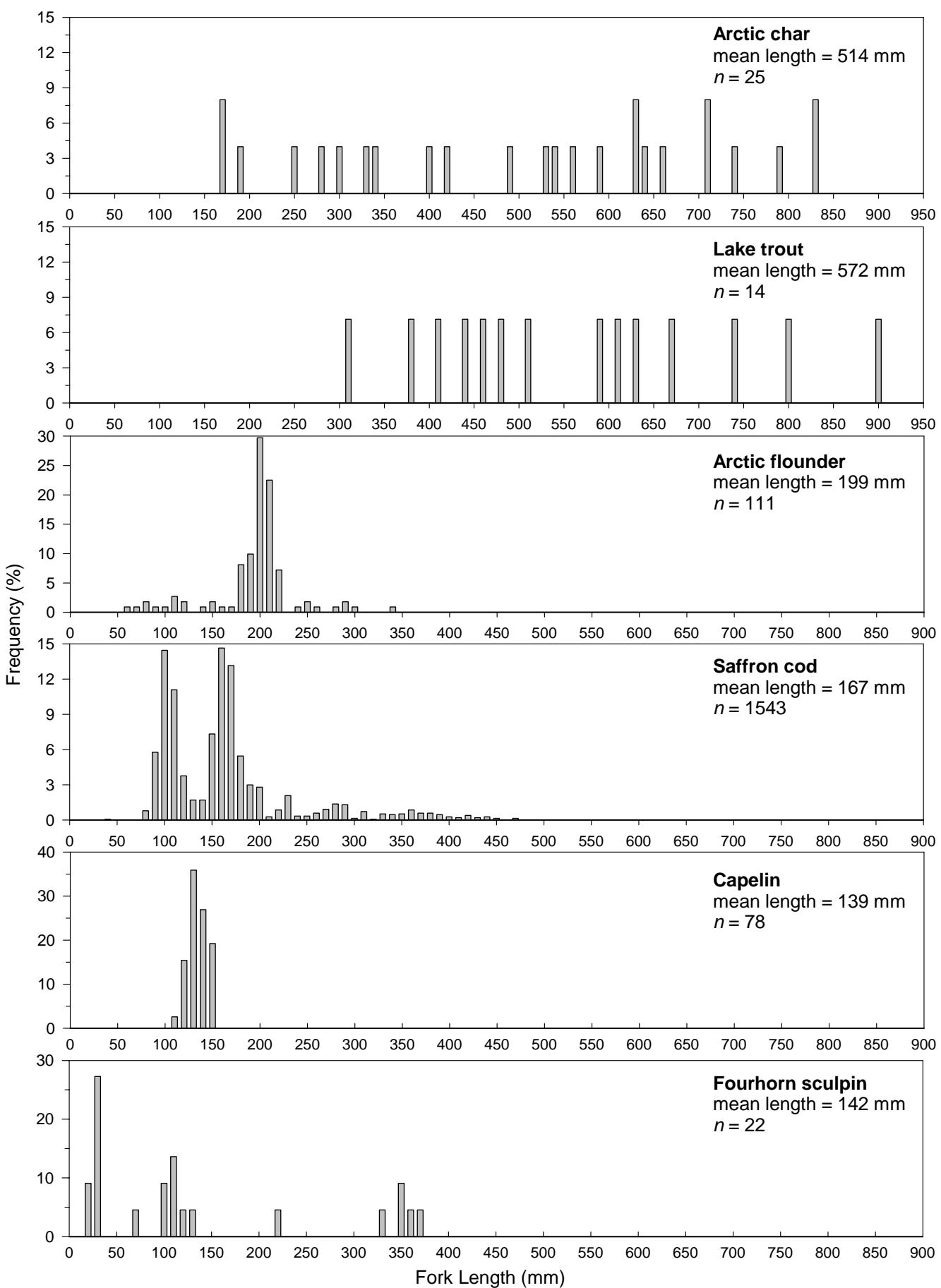


Figure 5.5 Length-frequency distribution of the main fish species captured in Roberts Bay near the proposed jetty and Little Roberts Outflow, August 2003.

### ***Cisco***

Seven cisco were also captured in the west basin of Roberts Bay. Fork lengths ranged from 87 to 473 mm, with a mean of 381 mm. Mean condition factor was 1.29 (range of 1.12 to 1.51). Stomach contents were examined for three fish; two had empty stomachs and the third had a total fullness of 10% and contained amphipods.

### ***Arctic Flounder***

#### *Size Distribution*

Arctic flounder captured in Roberts Bay ( $n=111$ ) ranged from 69 mm to 342 mm in fork length, with a mean of 199 mm. The length-distribution pattern for Arctic flounder was unimodal (Figure 5.5). Most fish (78% of the total catch) had fork lengths between 180 and 230 mm.

#### *Length-Weight Relationship*

The length-weight regression equation for Arctic flounder captured in Roberts Bay (Appendix D14) was:

$$\log \text{Weight (g)} = -5.479 + 3.269 \log \text{Fork Length (mm)} \quad (n=76; r^2=0.990)$$

or  $W = 3.3189 \times 10^{-6} * L^{3.269}$

The mean condition factor was 1.40; condition factors for individual fish ranged from 0.94 to 2.01.

### ***Saffron Cod***

#### *Size Distribution*

Saffron cod captured in Roberts Bay ( $n=1543$ ) ranged from 40 mm to 475 mm in fork length, with a mean of 167 mm. The length-distribution was bimodal (Figure 5.5). The two main size groupings were between 90 and 130 mm, and between 150 and 200 mm in fork length.

#### *Length-Weight Relationship*

The length-weight regression equation for saffron cod captured in Roberts Bay (Appendix D15) was:

$$\log \text{Weight (g)} = -6.053 + 3.370 \log \text{Fork Length (mm)} \quad (n=98; r^2=0.981)$$

or  $W = 8.8512 \times 10^{-7} * L^{3.370}$

The mean condition factor was 0.77; condition factors for individual fish ranged from 0.56 to 1.05.

#### *Diet*

Stomach contents were examined for one fish; total fullness of the stomach was 10% and it contained isopods.

#### ***Greenland Cod***

Greenland cod captured in Roberts Bay ( $n=3$ ) ranged from 491 mm to 586 mm in fork length, with a mean of 536 mm. The mean condition factor was 1.10; condition factors for individual fish ranged from 1.05 to 1.18. One fish was examined for stomach contents; this fish had an empty stomach.

#### ***Capelin***

Capelin captured in Roberts Bay ( $n=78$ ) ranged from 118 mm to 158 mm in fork length, with a mean of 139 mm. The length-distribution pattern for capelin was unimodal (Figure 5.5). Sex and maturity was measured for 78 fish; of those 34 were female and 44 were male. All of the capelin captured were in pre-spawning condition and likely on route to their spawning grounds (based on all fish moving eastbound; see section 5.4.3 Movements).

#### ***Fourhorn Sculpin***

Fourhorn sculpin captured in Roberts Bay ( $n=22$ ) ranged from 27 to 370 mm in fork length, with a mean of 142 mm. The length-distribution pattern exhibited a trimodal grouping, within the 20 to 40 mm, 100 to 140 mm, and 350 to 380 mm size categories (Figure 5.5). The mean condition factor was 0.94; condition factors for individual fish ranged from 0.61 to 1.30.

#### ***Pacific Herring***

Five pacific herring were captured in Roberts Bay. Fork lengths ranged from 191 to 295 mm, with a mean of 260 mm. Mean condition factor of 1.07 (range of 0.93 to 1.17). Stomach contents were examined for one fish; this fish had a total stomach fullness of 100% and the stomach contained unidentified invertebrate remains.

#### ***Longhead Dab***

One longhead dab was captured in the west basin of Roberts Bay. This fish had fork length of 335 mm and a condition factor of 1.53.

### 5.4.3 Movements

Directional movement data from the fyke nets set in Roberts Bay is presented in Figure 5.6. Similar numbers of saffron cod were captured in the east and the west bound nets throughout the sampling period; thus, these fish are likely utilizing the bay for rearing and feeding. Arctic founder had higher numbers in the west bound net during the end of July/beginning of August. The numbers of this species peaked during mid August and most fish were captured in the east bound net. During the end of August, few Arctic flounder were captured, and the east and west bound nets had similar numbers of this species. Of the large numbers of capelin captured, all of these fish were captured in the east bound net. The timing of their capture coincided with the spawning season. It is likely that the capelin were not spawning in the bay near the fyke net set, but were migrating through the area. Arctic char were captured primarily in the west bound fyke net during the end of July to mid August. This species was not captured between 14 and 22 August, and only a few were captured in the east bound net at the end of August. Between 10 and 13 August, fourhorn sculpin were all captured in the west bound net; during mid to end of August, most fourhorn sculpin were captured in the east bound net. Lake trout were primarily captured in the fyke net during the end of July and beginning of August. At the end of July, similar numbers of fish were captured in the east and west bound nets, although at the beginning of August, most were captured in the east bound net.

Of the fish tagged in Roberts Bay, two were recaptured. One Arctic char (636 mm in fork length) tagged on 21 August was recaptured on 1 September at the mouth of the Burnside River in Bathurst Inlet, approximately 200 km away. One of the lake trout captured (461 mm in fork length, wt=955 g) in Roberts Bay on 12 August 2003 was originally tagged on 28 August 2002 in Roberts Outflow (428mm in fork length).

## 5.5 SUMMARY

In total, 5371 fish representing 14 species were captured in the Doris North Project area during fisheries surveys conducted in 2003 (Table 5.14). Fish sampling was conducted in three lakes (Roberts, Little Roberts, and Doris lakes), nine streams (Roberts, Little Roberts, Doris, Tail, Pelvic, Glenn, and Windy outflows, and inflows to Roberts Lake and Pelvic Lake), and in the marine environments of Roberts Bay. The captured species included (in the order of abundance in the total catch) capelin (48.9%), saffron cod (31.9%), Arctic char (10.7%), ninespine stickleback (2.6%), lake trout (2.1%), Arctic flounder (2.1%), least cisco (0.5%), fourhorn sculpin (0.4%), cisco (0.3%), lake whitefish (0.2%), Pacific herring (0.1%), Greenland cod (0.1%), broad whitefish (0.04%), and longhead dab (0.02%).

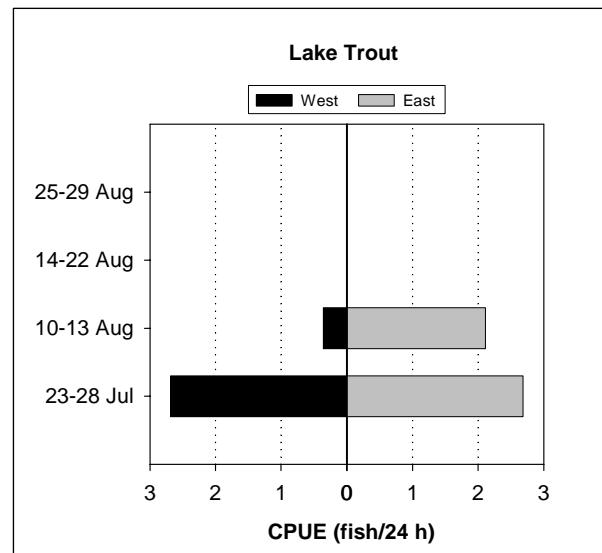
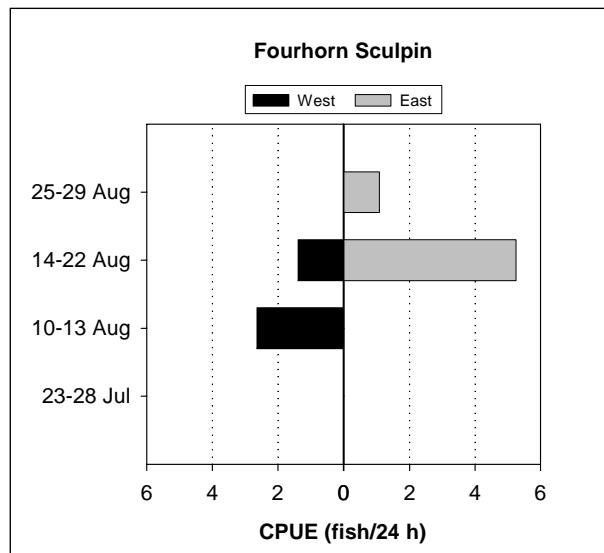
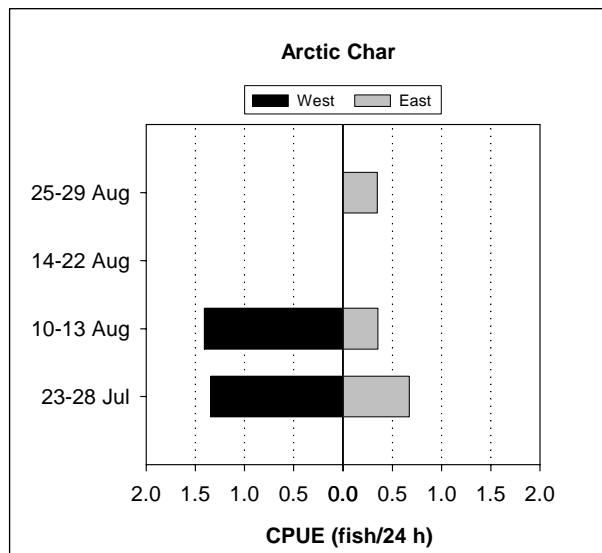
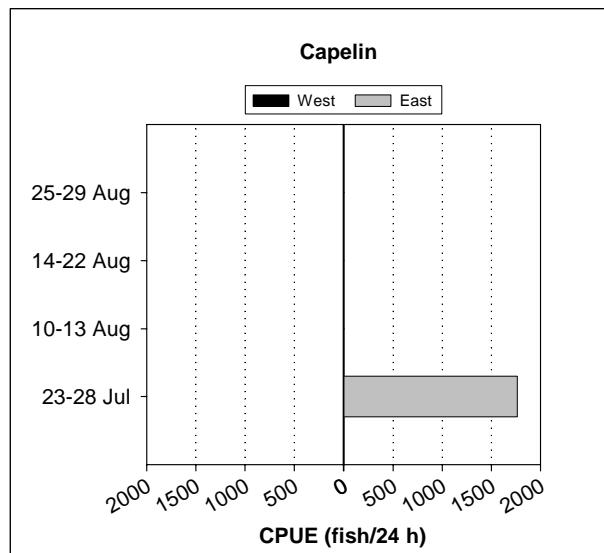
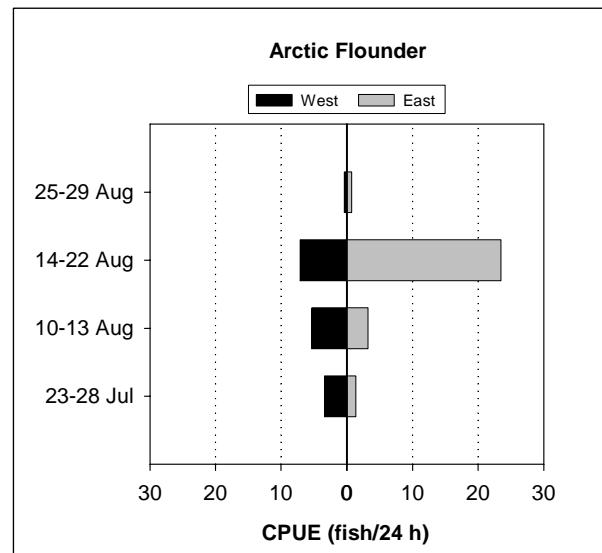
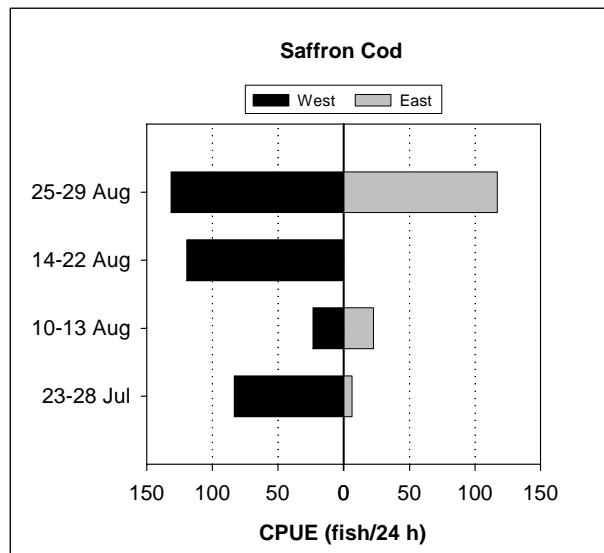


Figure 5.6 Directional movement of fish in Roberts Bay fyke net catches, 2003.

**Table 5.14 Summary of fish captures in Doris North Project Area, 2003.**

Species	Doris Lake	Doris Outflow	Glenn Outflow	L. Roberts Lake	L. Roberts Outflow	Pelvic Inflow	Pelvic Out	Roberts Bay	Roberts Lake	Roberts Outflow	Roberts Inflow	Tail Outflow	Windy Outflow	Species Total
Arctic char		5	8	7	1		13	25	5	479	34			577
Lake trout	5	12	7	6			15	14	2	43	8			112
Lake whitefish	5						6							11
Cisco	1			1			2	7		3				14
Least cisco	1			3			13	2		8				27
Broad whitefish										2				2
Ninespine stickleback	16	11		20	11	11	31		1	8	17	10	5	141
Arctic flounder								112						112
Saffron cod								1715						1715
Greenland cod								3						3
Capelin								2627						2627
Pacific herring								6						6
Fourhorn sculpin					1			22						23
Longhead dab								1						1
<b>Waterbody Total</b>	<b>28</b>	<b>28</b>	<b>15</b>	<b>37</b>	<b>13</b>	<b>11</b>	<b>80</b>	<b>4534</b>	<b>8</b>	<b>543</b>	<b>59</b>	<b>10</b>	<b>5</b>	<b>5371</b>

Note: Fish numbers include the total number of first time captures in 2003 for each species in each waterbody.

### *Lake Communities*

Fish sampling was conducted in Doris, Roberts, and Little Roberts lakes mainly to capture small fish to assess near-shore habitat use. Sampling methods included gill netting, fyke netting, beach seining, and backpack electrofishing. In total, 73 fish comprised of six species were captured. Five species were captured in Doris and Little Roberts lakes, whereas three species were captured in Roberts Lake. Ninespine stickleback were the predominant species in the lakes sampled (50.7%), followed by lake trout (17.8%), Arctic char (16.4%), lake whitefish (6.8%), least cisco (5.5%), and cisco (2.7%). Of the salmonids and coregonids captured, 59% were juveniles. Despite the considerable fish sampling effort expended in each of the lakes, relatively few fish were captured.

### *Stream Communities*

Fish sampling was conducted in nine streams; these included Roberts, Little Roberts, Doris, Tail, Pelvic, Glenn, and Windy outflows, and inflows to Roberts Lake and Pelvic Lake. These streams (with the exception of Roberts Outflow) were sampled as part of the initial scoping of potential fish collection sites for the design of the Metal Mining Environmental Effects Monitoring (EEM) program. In total, 221 fish comprised of seven species were captured by backpack electrofishing. In three of the sampled streams (Pelvic Inflow, and Tail and Windy outflows), ninespine stickleback were the only species captured. Pelvic Outflow had the highest diversity of fish species, with a total of five. Of the streams sampled for EEM, ninespine stickleback was the dominant species encountered (43.4%), followed by Arctic char (27.6%), and lake trout (19.0%); other species captured included lake whitefish, least cisco, cisco, and a fourhorn sculpin.

### *Arctic Char in Roberts Lake System*

A fish fence and trap and a fyke net were installed between 6 August and 8 September in Roberts Outflow to determine the number of Arctic char migrating from the ocean to Roberts Lake. In total, 543 fish representing six species were caught in Roberts Outflow. Arctic char was the predominant species in the overall catch (88.2%), followed by lake trout (7.9%).

The number of Arctic char entering the trap on a daily basis varied greatly. The daily catch generally did not exceed 18 fish/day, with the exception of two days (66 and 21 fish). The 2003 open-water period was a high flow year, and the majority of fish managed to pass through the boulder garden (65%). Most of the fish captured in Roberts Outflow (62% of the catch) were larger than 250 mm in fork length; these were primarily adults migrating from the marine environment into Roberts Lake. Arctic char smaller than 250 mm in fork length were juveniles likely undergoing localized movements between fresh water habitats (e.g., between Roberts and Little Roberts lakes).

### *Near-shore Fish Use in Roberts Bay*

Roberts Bay is the final receiving waterbody for lakes in the Doris North Project area and the location of a proposed jetty. Two sites were sampled with a fyke net to determine the fish species inhabiting the near-shore marine environments. In total, 4534 fish comprised of 11 species were captured during July and August 2003. Capelin was the predominant species in the overall catch (57.9%), followed by saffron cod (37.8%) and Arctic flounder (2.5%). Other species included Arctic char, fourhorn sculpin, lake trout, cisco, pacific herring, greenland cod, least cisco, and longhead dab.

Species diversity and composition differed between the two basins of Roberts Bay. In the west basin, 11 fish species were encountered, whereas in the east basin, seven fish species were documented. Capelin and saffron cod were the dominant species in the west basin (69.1% and 28.5%, respectively), whereas in the east basin, capelin was not captured and saffron cod was by far the dominant species (86.2%).

Directional movement data from the fyke nets set in Roberts Bay indicated that similar numbers of saffron cod were captured in the east and the west bound nets throughout the sampling period; thus, these fish are likely utilizing the bay for rearing and feeding. Of the large numbers of capelin captured, all of these fish were captured in the east bound net. The timing of their capture coincided with the spawning season. It is likely that the capelin were not spawning in the bay near the fyke net set, but were migrating through the area.

Of the fish tagged in Roberts Bay, two were recaptured. One adult Arctic char tagged on 21 August was recaptured on 1 September at the mouth of the Burnside River in Bathurst Inlet, approximately 200 km away. One of the adult lake trout captured in Roberts Bay on 12 August 2003 was originally tagged on 28 August 2002 in Roberts Outflow.

## 6.0 FISH HABITAT

### 6.1 METHODS

Fish habitat quality was assessed in Roberts Lake during August 2003. Habitat characteristics were visually assessed through field surveys. Substrate composition was assessed along the littoral zone of the lake. Substrate types were classified into six categories: silt, sand, gravel, cobble, boulder, and bedrock. Percent substrate composition was recorded at the end of each bathymetry transect.

Habitat quality ratings were based on the habitat classification system outlined in Table 6.1 (this system was similar to Rescan 2001). This table rates the ability of different substrates to provide critical habitat for the primary fish species found in area lakes. All six primary substrate types were classified as poor, fair, good, or excellent for each life history requisite and each group of species. For example, lake trout spawn over cobble and boulders; therefore, both substrate types were rated as good for spawning. Cobble and sand were rated as good and fair, respectively, for coregonid spawning because coregonids spawn over cobble and sometimes over sand (lake whitefish). Boulders and cobble were classified as good rearing habitat because of their excellent provision of cover, whereas all other substrate types were rated as poor rearing habitat. Sand and silt bottoms are good forage areas for coregonids, as they provide good habitat for benthic invertebrates. Lake trout primarily feed on coregonids and smaller lake trout; thus, areas where these prey species are likely to be present were classified as good habitat. Based on an overall average of all habitat rankings for lake trout and coregonids, lake habitat quality for silt and sand was classified as fair, cobble and gravel as excellent, boulders as good, and bedrock as poor. By using the map illustrating zonal substrate composition, a lake map depicting habitat quality was produced. If two substrate types were present, the most abundant substrate was used for rating habitat quality. Where three or more substrates were present, a weighted average was used to rank habitat quality.

**Table 6.1 Lake substrate habitat classification scheme for Arctic char, lake trout, and coregonid species in Roberts Lake, 2003.**

Substrate Type	Potential Habitat Use									Overall Habitat Quality	
	Spawning			Rearing (cover)			Feeding				
	Arctic Char	Lake Trout	Least Cisco/Cisco	Arctic Char	Lake Trout	Least Cisco/Cisco	Arctic Char	Lake Trout	Least Cisco/Cisco		
Silt	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Fair <sup>a</sup>	
Sand	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Good	Good	Fair	
Cobble/Gravel	Excellent	Excellent	Good	Excellent	Good	Good	Excellent	Good	Fair	Excellent <sup>b</sup>	
Boulder	Good	Good	Poor	Good	Good	Good	Good	Good	Poor	Good	
Bedrock	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	

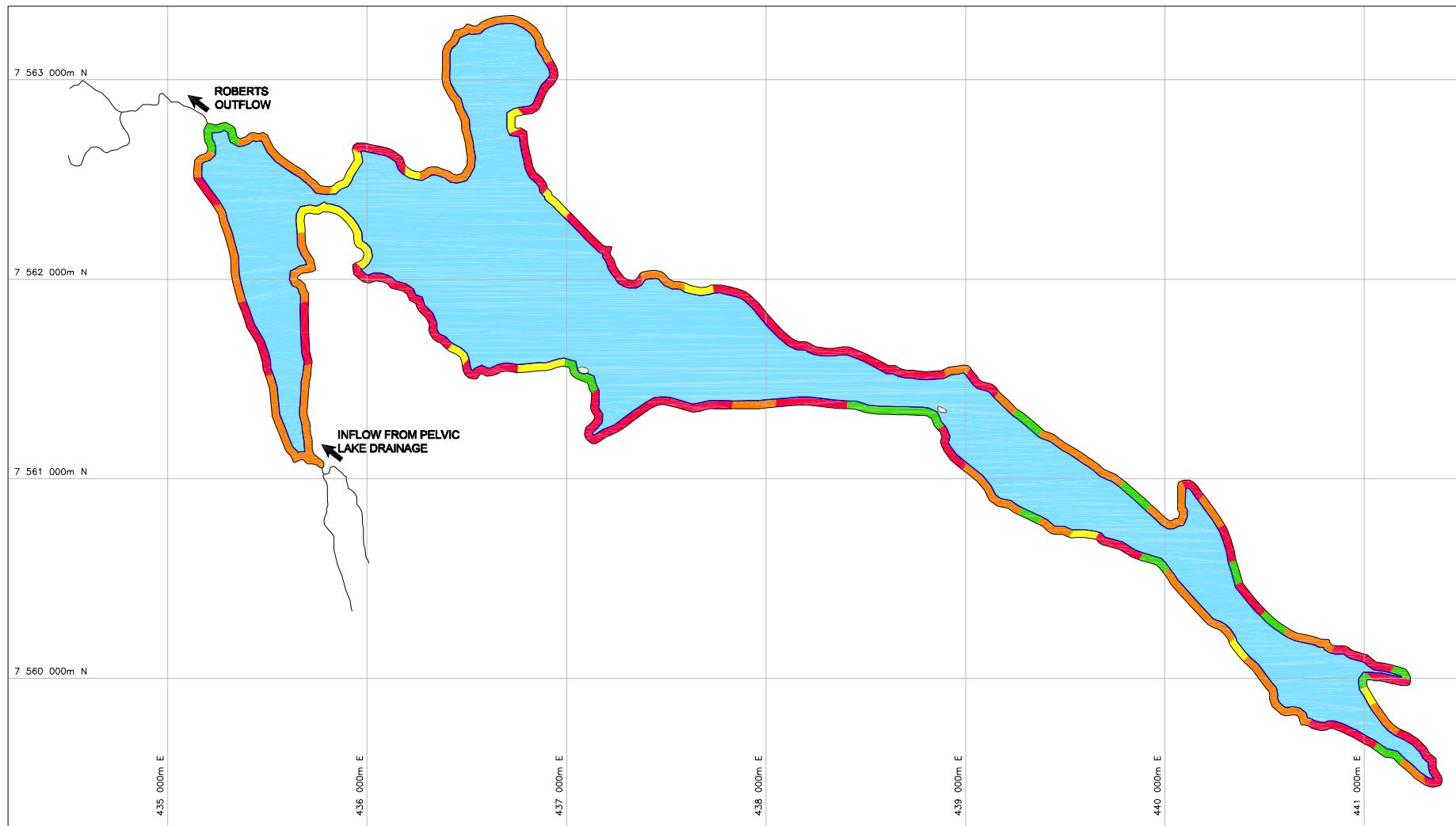
<sup>a</sup> Rated as fair (instead of poor) to reflect the fact that silt can be a good substrate type for feeding.

<sup>b</sup> Rated as excellent (instead of good) to reflect the fact that cobble and gravel can be an excellent substrate for spawning.

## 6.2 ROBERTS LAKE

Bathymetric survey data collected during 2003 indicated that this 7.0 km long lake had an area of 53.6 km<sup>2</sup>, a mean depth of 14.0 m, and a maximum recorded depth of 37.5 m. The Roberts Lake shoreline was very diverse in fish habitat quality (Figure 6.1).

Salmonids and coregonids are present in Roberts Lake (RL&L/Golder 2002, 2003a, 2003b). Cobble and boulders generally provide fair to good spawning, feeding and rearing habitat for lake trout and coregonid species; however, Arctic char prefer clean gravel areas for spawning. Areas containing a high percentage of coverage by these substrate types (gravel, cobble, boulder) were classified as good and excellent fish habitat. Approximately 50.1% of shoreline was ranked as good to excellent fish habitat (Figure 6.1). There were two shoal areas in the central basin of the lake; these areas were rated as excellent feeding and rearing habitat for salmonids and coregonids; as well, these shoals provided excellent spawning habitat for lake trout and coregonids. Sand (rated as fair habitat) dominated the western shoreline and bedrock (rated as poor habitat) was present in pockets throughout the lake.

**LEGEND****HABITAT QUALITY (PREDOMINANT SUBSTRATE)**

- POOR (BEDROCK)
- FAIR (SAND/SILT)
- GOOD (BOULDER)
- EXCELLENT (COBBLE/GRAVEL)

500 0 500  
SCALE METRES

**TITLE****HABITAT QUALITY OF ROBERTS LAKE**

PROJECT 03-1370-007,3000		FILE No. Hab Qual-Robert-LK
DESIGN	AL	11/11/03
CADD	PSR	13/11/03
CHECK	AL	14/11/03
REVIEW		

**FIGURE: 6.1**

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RL&L Environmental Services Ltd. / Golder Associates Ltd. 2003. Doris North Project No Net Loss Plan. Prepared for Miramar Hope Bay Ltd. RL&L/Golder Report No. 022-7044: 27 p. + 2 app.

## 8.0 CLOSURE

We trust the information contained in this report is sufficient for your present needs. Should you have any questions regarding the project, please do not hesitate to contact the undersigned.

Yours truly,

**GOLDER ASSOCIATES LTD.**

**Principal Author:**



Alison Little, M.Sc., P.Biol.  
Fisheries Biologist

**Report reviewed by:**



Gary Ash, M.Sc., P.Biol  
Senior Fisheries Biologist, Principal

**Contributing Authors:**



J. David Hamilton, M.Sc., R.P. Bio. CPESC  
Senior Aquatic Scientist



Nathan Schmidt, Ph.D., P.Eng.  
Senior Water Resources Engineer, Associate

## **PHOTOGRAPHIC PLATES**





**Plate 1** Roberts Bay, 12 August 2003. Adult Arctic flounder captured in fyke net F1 near the proposed jetty.



**Plate 2** Roberts Bay, 21 August 2003. Fourhorn sculpin captured in fyke net F2 near the mouth of Little Roberts Outflow.



**Plate 3** Roberts Bay, 25 August 2003. Adult pacific herring captured in gill net G9 in the west basin of Roberts Bay.



**Plate 4** Roberts Bay, 23 July 2003. Male (top) and female (bottom) capelin captured in fyke net F1.





**Plate 5** **Roberts Bay**, 23 July 2003. Aerial view of fyke net F1 set near the proposed jetty.



**Plate 6** **Doris Outflow**, 20 August 2003. View of waterfall (4.3 m in height), located 400 m downstream of Doris Lake.



**Plate 7** **Roberts Outflow**, 1 September 2003. Upstream view of boulder garden. Note: higher water level compared to Plate 8.



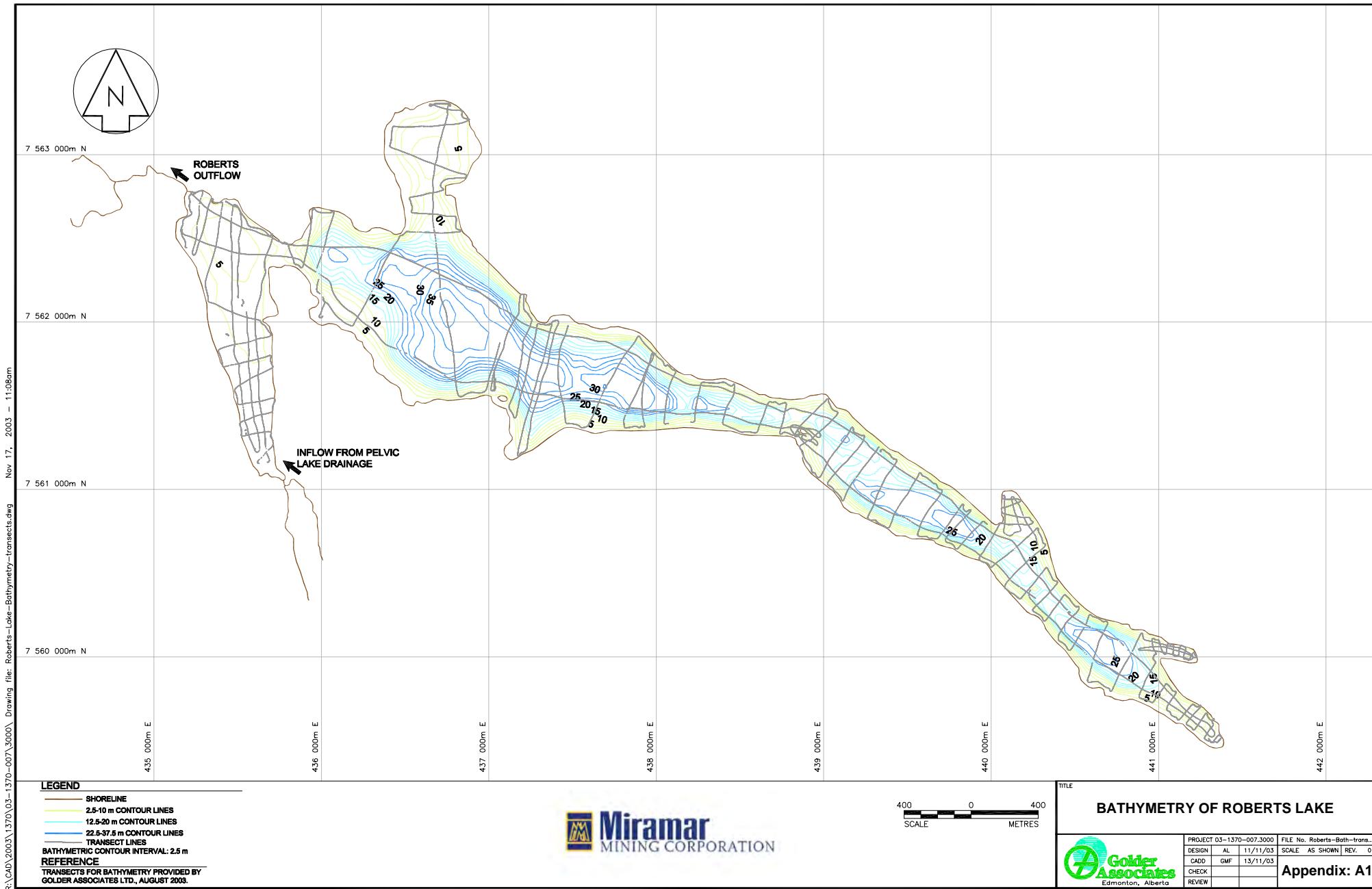
**Plate 8** **Roberts Outflow**, 17 August 2002. Similar view as in Plate 7 of boulder garden where fish stranding occurred in 2002.

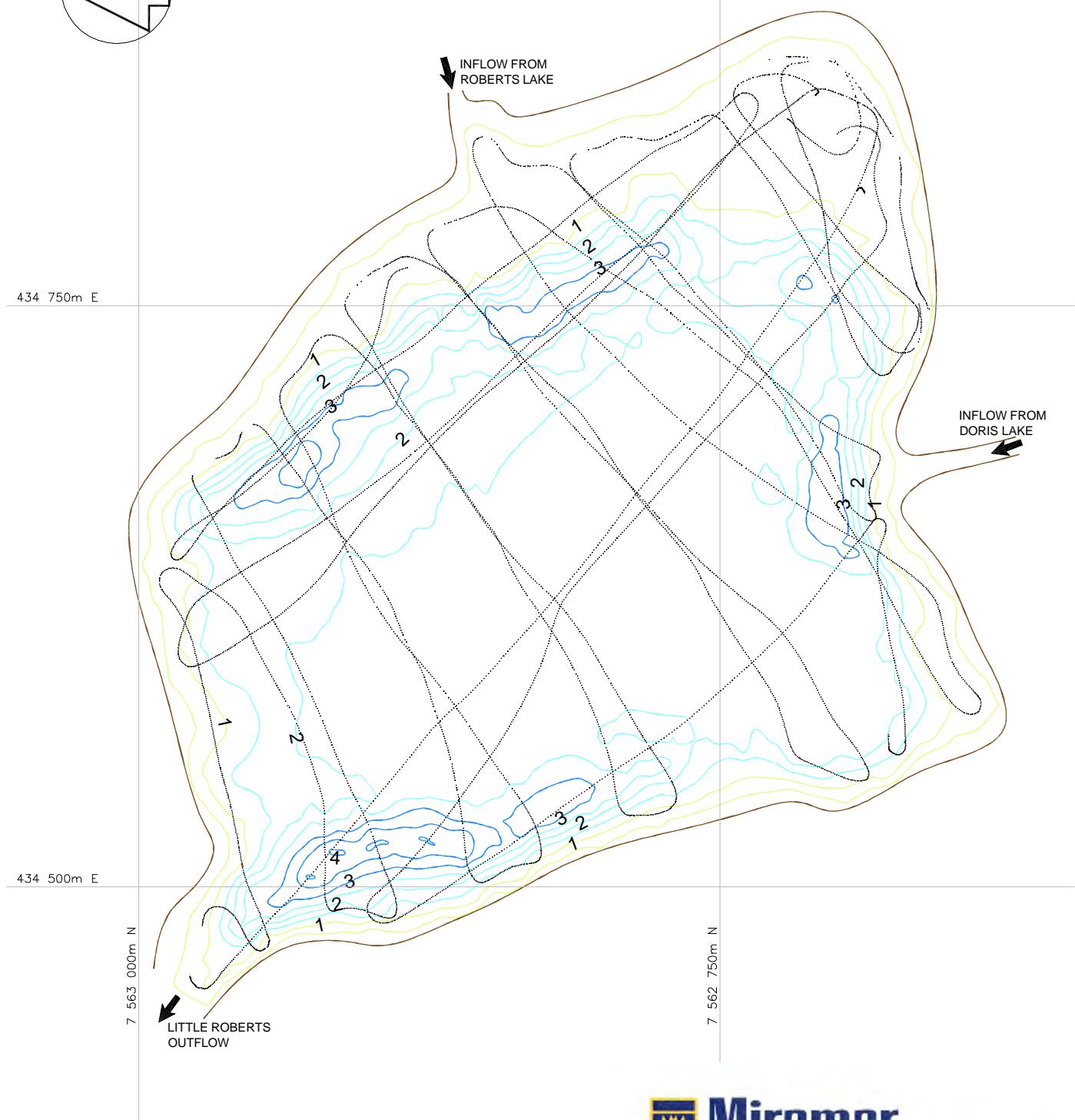


## **APPENDIX A**

### **BATHYMETRY**







#### LEGEND

- SHORELINE
- 0.5-m CONTOUR LINES
- 1.5-2.5 m CONTOUR LINES
- 3-3.5 m CONTOUR LINES
- ..... TRANSECT LINES
- BATHYMETRIC CONTOUR INTERVAL: 0.5 m

#### REFERENCE

TRANSECTS FOR BATHYMETRY PROVIDED BY  
GOLDER ASSOCIATES LTD., AUGUST 2003.

50 0 50  
SCALE METRES



**Miramar**  
MINING CORPORATION

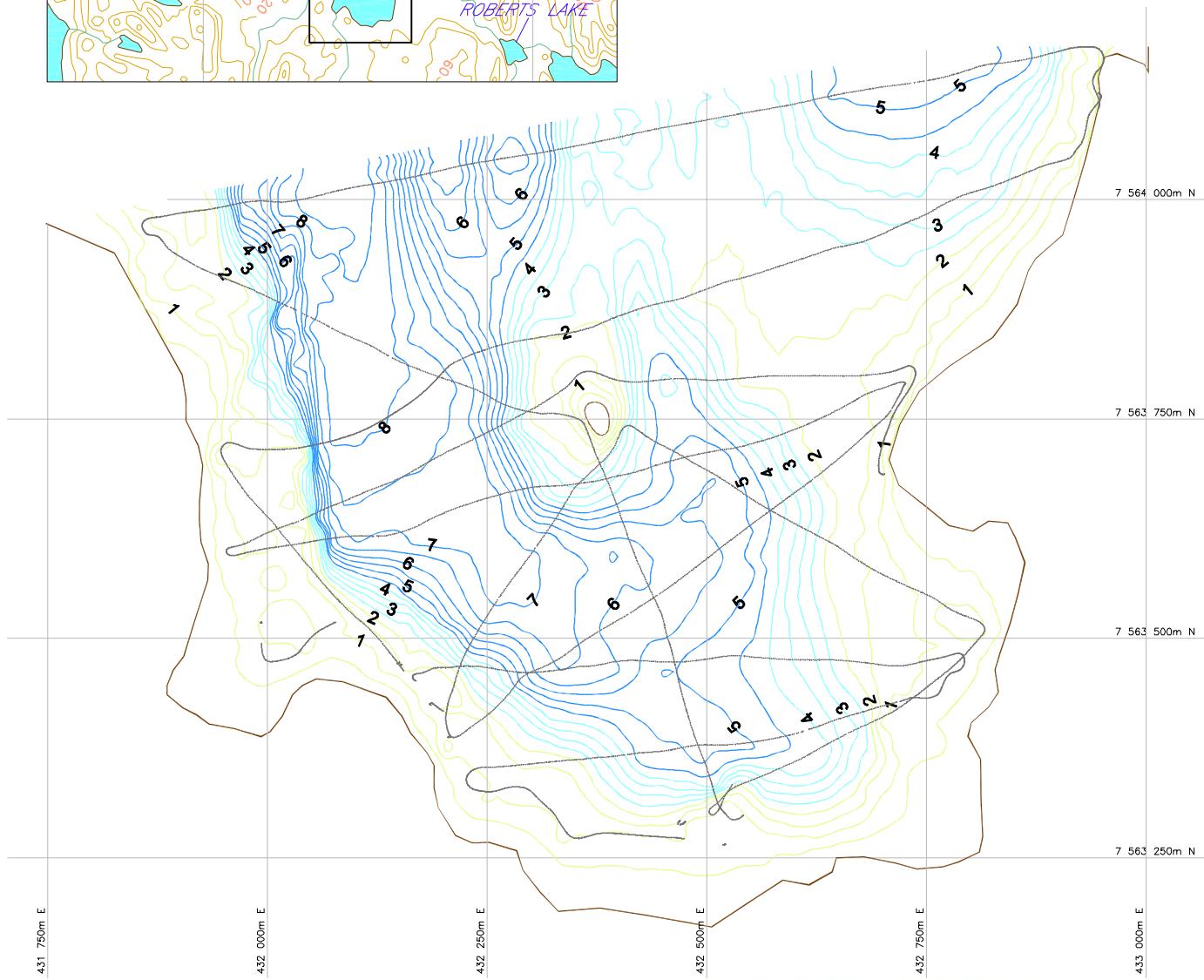
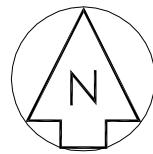
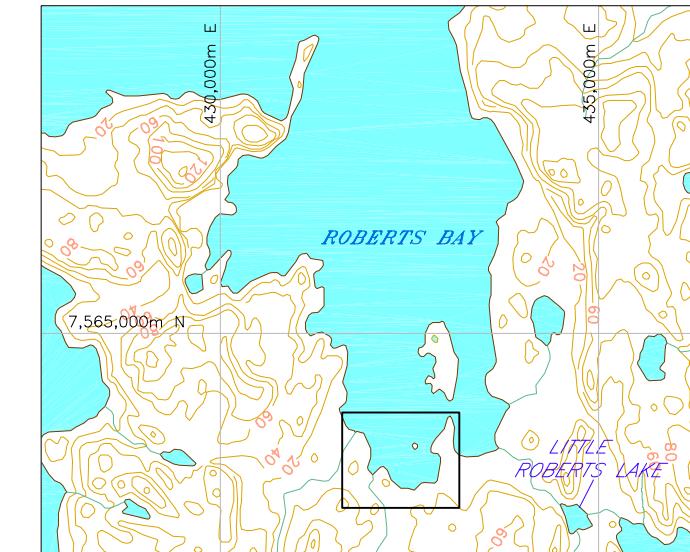
#### TITLE

## BATHYMETRY OF LITTLE ROBERTS LAKE

 **Golder Associates**  
Calgary, Alberta

PROJECT 03-1370-007.3000	FILE No. Lt Rob Lk Bath-tran
DESIGN AL 11/11/03	SCALE AS SHOWN REV. 0
CADD GMF 13/11/03	
CHECK	
REVIEW	

**Appendix: A2**

**LEGEND**

- SHORELINE
- 0.5-2.0 m CONTOUR LINES
- 2.5-4.0 m CONTOUR LINES
- 4.5-8.5 m CONTOUR LINES
- TRANSECT LINES

BATHYMETRIC CONTOUR INTERVAL: 0.5 m

**REFERENCE**TRANSECTS FOR BATHYMETRY PROVIDED BY  
GOLDER ASSOCIATES LTD., AUGUST 2003.

150 0 150  
SCALE METRES



TITLE

**BATHYMETRY OF ROBERTS BAY**

PROJECT 03-1370-007.3000	FILE No. Rob Bay Bath-trans..
DESIGN AL 11/11/03	SCALE AS SHOWN REV. 0
CADD GMF 13/11/03	
CHECK	
REVIEW	

**Appendix: A3**



**APPENDIX B**

**STREAM DISCHARGE DATA**



# DORIS LAKE OUTLET HYDROMETRIC STATION

**H71**  
**FACTSHEET**

## LOCATION AND PURPOSE

Temporary station, established on 30 June 2003. Located on the right downstream bank of the Doris Lake Outlet channel, approximately 50 m downstream of the lake outlet.

Benchmark: Top of embedded boulder; 100.000 m (local)  
Coordinates: UTM: 434108 m E, 7559274 m N (NAD27)  
Datalogger: Optimum Instruments #0636

Drainage Area: 93.1 km<sup>2</sup>  
Lat/Long: 68°08'30" N, 106°35'14" W  
Transducer: KPSI #0202945



Aerial view of Doris Lake Outlet looking north along outlet channel.



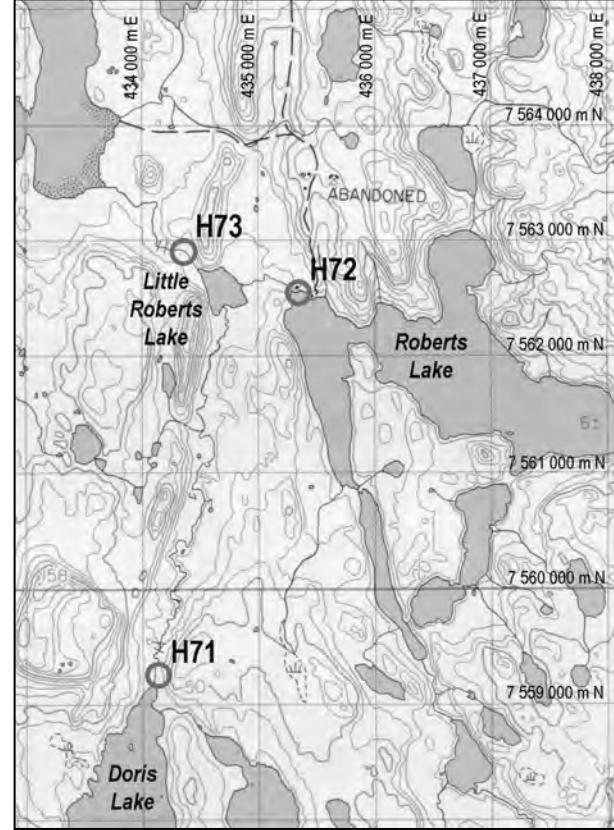
Doris Lake Outlet looking south from Station H71 to lake outlet.



Station H71 from RDB looking northwest.



Station H71 from RDB looking southeast.



NTS Mapping of Area.

# ROBERTS LAKE OUTLET HYDROMETRIC STATION

**H72**  
**FACTSHEET**

## LOCATION AND PURPOSE

Temporary station, established on 30 June 2003. Located on the right downstream bank of Roberts Lake, approximately 20 m upstream of the lake outlet.

Benchmark: Top of bedrock outcrop; 100.000 m (local)  
Coordinates: UTM: 435310 m E, 7562560 m N (NAD27)  
Datalogger: Optimum Instruments #0638

Drainage Area: 97.8 km<sup>2</sup>  
Lat/Long: 68°10'10" N, 106°33'32" W  
Transducer: KPSI #0202947



Aerial view of Roberts Lake Outlet looking northeast.



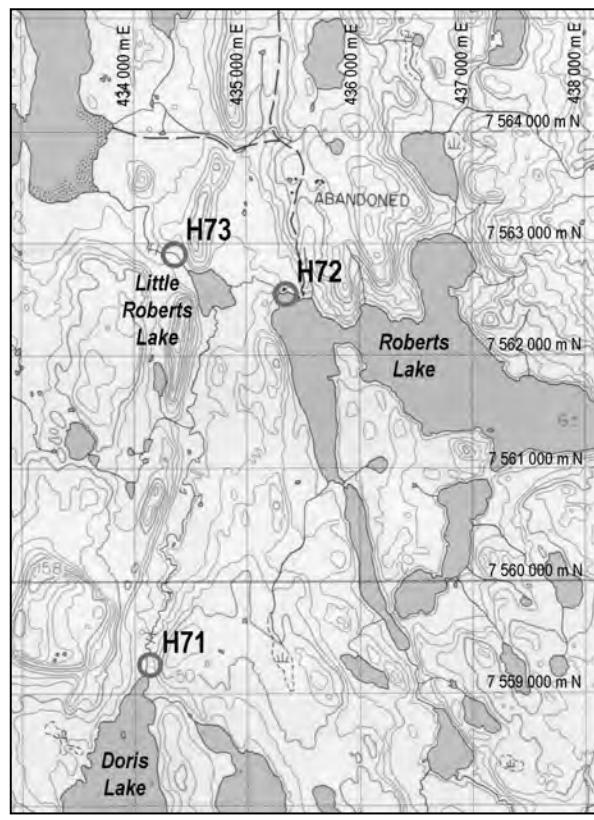
Station H72 from lake looking northwest.



Station H72 from bank looking southeast.



Station H72 from bank looking east.



NTS Mapping of Area.

# LITTLE ROBERTS LAKE OUTLET HYDROMETRIC STATION

# H73 FACTSHEET

## LOCATION AND PURPOSE

Temporary station, established on 30 June 2003. Located on the right downstream bank of the Doris Lake Outlet channel, approximately 50 m downstream of the lake outlet.

Benchmark: Top of embedded boulder; 100.000 m (local)  
Coordinates: UTM: 434320 m E, 7562920 m N (NAD27)  
Datalogger: Optimum Instruments #0639

Drainage Area: 198.9 km<sup>2</sup>  
Lat/Long: 68°10'20" N, 106°34'59" W  
Transducer: KPSI #0202948



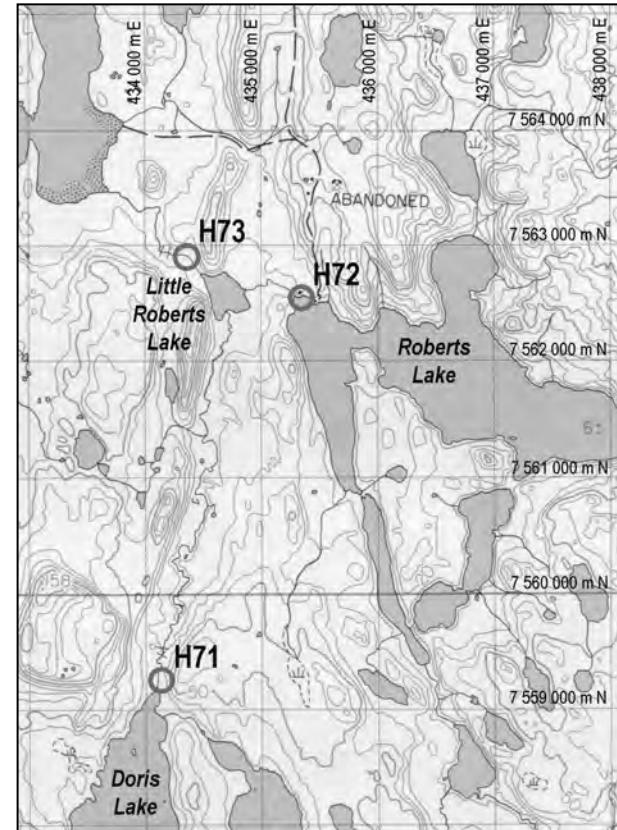
Panoramic view of H73 from LDB looking west.



Station H73 from RDB looking downstream.



Station H73 from bank looking east.



NTS Mapping of Area.



**APPENDIX C**

**PHYSICAL LIMNOLOGY AND WATER QUALITY**



Appendix C1. Dissolved oxygen (DO) concentrations, water temperature and Secchi transparency in Doris North Project lakes, July-September 2003.

Roberts Lake - Site A (13W 436615 7561971)						Roberts Lake - Site B (13W 435587 7562161)						Doris Lake (13W 433799 7558286)														
27-Jul-2003			17-Aug-2003			3-Sep-2003			27-Jul-2003			17-Aug-2003			3-Sep-2003			25-Jul-2003			18-Aug-2003			3-Sep-2003		
8:30 PM Secchi = 2.7 m Total Depth = 37.6 m			10:30 AM Secchi = 2.3 m Total Depth = 38.1 m			11:45 AM Secchi = 2.9 m Total Depth = 37.9 m			3:15 PM Secchi = 2.1 m Total Depth = 6.7 m			3:15 PM Secchi = 1.7 m Total Depth = 7.0 m			10:00 AM Secchi = 1.5 m Total Depth = 7.0 m			7:30 PM Secchi = 1.9 m Total Depth = 13.6 m			3:00 PM Secchi = 1.6 m Total Depth = 14.9 m			5:00 PM Secchi = 1.8 m Total Depth = 14.9 m		
Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)
0.1	12.9	9.3	0.1	11.8	8.7	0.1	11.7	9.6	0.1	12.4	11.7	0.1	11.7	8.8	0.1	11.6	10.1	0.1	11.8	10.7	0.1	11.2	10.3	0.1	11.9	10.5
1.0	12.8	9.2	1.0	11.8	8.7	1.0	11.8	9.6	0.5	12.4	11.5	0.5	11.7	8.8	0.5	11.5	10.0	1.0	11.7	10.4	1.0	11.2	10.2	1.0	11.8	10.5
2.0	12.9	9.0	2.0	11.8	8.7	2.0	11.8	9.5	1.0	12.4	11.0	1.0	11.6	8.8	1.0	11.5	10.0	2.0	11.6	10.1	2.0	11.1	10.1	2.0	11.8	10.5
3.0	12.9	8.9	3.0	11.8	8.7	3.0	11.7	9.5	1.5	13.0	9.9	1.5	11.6	8.8	1.5	11.5	10.0	3.0	11.5	10.1	3.0	10.9	10.0	3.0	11.8	10.5
4.0	13.0	8.7	4.0	11.7	8.6	4.0	11.7	9.5	2.0	13.2	9.1	2.0	11.6	8.8	2.0	11.5	10.0	4.0	11.6	10.0	4.0	10.9	10.0	4.0	11.8	10.4
5.0	13.0	7.9	5.0	11.7	8.6	5.0	11.7	9.4	2.5	13.3	8.7	2.5	11.6	8.8	2.5	11.5	10.0	5.0	11.6	10.0	5.0	10.9	10.0	5.0	11.8	10.4
6.0	13.0	7.2	6.0	11.7	8.6	6.0	11.7	9.4	3.0	13.3	8.4	3.0	11.6	8.8	3.0	11.5	10.0	6.0	11.6	9.8	6.0	10.9	10.0	6.0	11.8	10.3
7.0	12.9	6.9	7.0	11.7	8.6	7.0	11.6	9.4	3.5	13.4	8.2	3.5	11.6	8.8	3.5	11.5	10.0	7.0	11.5	9.8	7.0	10.8	10.0	7.0	11.7	10.3
8.0	12.9	6.7	8.0	11.7	8.6	8.0	11.6	9.3	4.0	13.5	7.8	4.0	11.6	8.8	4.0	11.5	10.0	8.0	11.5	9.8	8.0	10.8	10.0	8.0	11.7	10.3
9.0	12.8	6.5	9.0	11.7	8.6	9.0	11.6	9.3	4.5	13.3	7.5	4.5	11.6	8.8	4.5	11.5	10.0	9.0	11.5	9.8	9.0	10.8	9.9	9.0	11.7	10.3
10.0	12.8	6.5	10.0	11.7	8.6	10.0	11.5	9.3	5.0	13.4	7.4	5.0	11.6	8.8	5.0	11.5	10.0	10.0	11.5	9.8	10.0	10.7	9.9	10.0	11.6	10.2
11.0	12.8	6.5	11.0	11.7	8.6	11.0	11.6	9.3	5.5	13.3	7.3	5.5	11.5	8.8	5.5	11.5	10.0	11.0	11.4	9.7	11.0	10.7	9.9	11.0	11.4	10.0
12.0	12.8	6.5	12.0	11.7	8.6	12.0	11.5	9.3	6.0	13.2	7.3	6.0	11.4	8.8	6.0	11.5	10.0	12.0	11.2	9.6	12.0	10.7	9.9	12.0	10.5	9.8
13.0	12.8	6.4	13.0	11.7	8.6	13.0	11.6	9.3	6.5	12.0	7.2	6.5	11.3	8.7	6.5	11.4	9.9	13.0	10.9	9.5	13.0	10.7	9.8	13.0	10.0	9.5
14.0	12.7	6.4	14.0	11.7	8.6	14.0	11.6	9.3																		
15.0	12.8	6.3	15.0	11.7	8.6	15.0	11.5	9.2																		
16.0	12.7	6.2	16.0	11.7	8.6	16.0	11.5	9.2																		
17.0	12.8	6.0	17.0	11.7	8.6	17.0	11.5	9.2																		
18.0	12.8	5.9	18.0	11.7	8.6	18.0	11.5	9.2																		
19.0	12.7	5.8	19.0	11.7	8.6	19.0	11.5	9.1																		
20.0	12.5	5.8	20.0	11.7	8.6	20.0	11.3	8.9																		
21.0	12.8	5.8	21.0	11.7	8.6	21.0	11.2	8.8																		
22.0	12.8	5.8	22.0	11.7	8.6	22.0	11.1	8.7																		
23.0	12.8	5.8	23.0	11.7	8.6	23.0	11.1	8.7																		
24.0	12.8	5.8	24.0	11.7	8.6	24.0	11.1	8.7																		
25.0	12.8	5.7	25.0	11.7	8.6	25.0	11.0	8.7																		
26.0	12.8	5.7	26.0	11.7	8.6	26.0	11.0	8.7																		
27.0	12.8	5.7	27.0	11.7	8.6	27.0	11.1	8.7																		
28.0	12.8	5.7	28.0	11.7	8.6	28.0	11.0	8.7																		
29.0	12.8	5.7	29.0	11.7	8.6	29.0	11.0	8.7																		
30.0	12.7	5.7	30.0	11.7	8.6	30.0	11.0	8.6																		
31.0	12.8	5.7	31.0	11.7	8.6	31.0	11.0	8.6																		
32.0	12.8	5.7	32.0	11.7	8.6	32.0	11.0	8.6																		
33.0	12.8	5.7	33.0	11.7	8.6	33.0	10.9	8.6																		
34.0	12.8	5.7	34.0	11.7	8.6	34.0	10.8	8.6																		
35.0	12.8	5.7	35.0	11.6	8.6	35.0	10.7	8.6																		
36.0	12.8	5.7	36.0	11.6	8.6	36.0	10.6	8.6																		
37.0	12.5	5.6	37.0	11.6	8.6	37.0	10.4	8.5																		

Appendix C1. Dissolved oxygen (DO) concentrations, water temperature and Secchi transparency in Doris North Project lakes, July-September 2003.

Tail Lake (13W 434987 7557952)						Little Roberts Lake (13W 434723 7562724)						Reference Lake (13W 436917 7558539)														
26-Jul-2003			18-Aug-2003			4-Sep-2003			27-Jul-2003			16-Aug-2003			4-Sep-2003			26-Jul-2003			17-Aug-2003			4-Sep-2003		
1:00 PM Secchi = 5.2 m Total Depth = 6.1 m			12:30 PM Secchi = 4.2 m Total Depth = 6.1 m			10:30 AM Secchi = 1.6 m Total Depth = 5.2 m			7:00 PM Secchi = 2.2 m Total Depth = 3.9 m			7:00 PM Secchi = 1.1 m Total Depth = 4.2 m			4:00 PM Secchi = 1.7 m Total Depth = 3.9 m			3:40 PM Secchi = 1.2 m Total Depth = 5.1 m			4:20 PM Secchi = 1.0 m Total Depth = 4.6 m			1:00 PM Secchi = 0.7 m Total Depth = 4.5 m		
Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)	Depth (m)	DO (mg/L)	Temp (°C)
0.1	10.9	14.4	0.1	11.0	9.5	0.1	10.8	10.4	0.1	11.3	14.0	0.1	11.5	9.7	0.1	11.0	10.2	0.1	11.2	16.2	0.1	11.7	9.5	0.1	11.0	10.4
0.5	10.8	14.2	0.5	11.0	9.4	1.0	10.8	10.4	0.5	11.2	13.8	0.5	11.4	9.7	1.0	11.0	10.2	0.5	11.2	15.6	0.5	11.7	9.5	1.0	11.0	10.4
1.0	10.8	13.9	1.0	10.9	9.3	2.0	10.8	10.4	1.0	11.1	13.7	1.0	11.4	9.7	2.0	11.0	10.2	1.0	11.2	14.6	1.0	11.7	9.5	2.0	10.9	10.4
1.5	10.8	13.9	1.5	11.0	9.2	3.0	10.8	10.4	1.5	11.4	13.5	1.5	11.4	9.7	3.0	11.0	10.2	1.5	11.1	14.4	1.5	11.7	9.4	3.0	11.0	10.3
2.0	10.8	13.9	2.0	10.9	9.2	4.0	10.8	10.3	2.0	11.5	13.4	2.0	11.4	9.7	3.5	11.0	10.1	2.0	11.1	14.2	2.0	11.6	9.4	4.0	10.9	10.3
2.5	10.8	13.8	2.5	11.0	9.2	5.0	10.7	10.3	2.5	11.5	13.2	2.5	11.3	9.7				2.5	10.7	13.9	2.5	11.7	9.4			
3.0	10.8	13.7	3.0	11.0	9.1				3.0	11.5	13.0	3.0	11.3	9.7				3.0	9.6	13.6	3.0	11.7	9.4			
3.5	10.9	13.6	3.5	11.0	9.1				3.5	11.0	12.7	3.5	11.3	9.7				3.5	9.2	13.5	3.5	11.6	9.4			
4.0	11.0	13.5	4.0	11.0	9.0				4.0	11.2	9.7							4.0	7.8	13.4	4.0	11.6	9.4			
4.5	11.0	13.5	4.5	11.0	9.0													4.5	7.6	13.3						
5.0	10.8	13.5	5.0	11.1	9.0													4.8	6.4	13.2						
5.5	10.9	13.5	5.5	11.0	9.0																					
5.8	10.7	13.4	6.0	10.7	9.0																					

Appendix C2. Physical and conventional parameters, anions, nutrients, chlorophylla and metal concentrations in water quality samples from Doris North Project waterbodies, 2003.

Parameter	Unit	Detection Limit	Doris Lake			Doris Split		Tail Lake			Roberts Lake - Site A			Roberts Lake - Site B			Roberts Lake - Site B (Split)			Little Roberts Lake			Reference Lake			Doris Outflow			Tail Outflow			Little Roberts Outflow			Roberts L. Inflow
			27-Jul	18-Aug	3-Sep	27-Jul	27-Jul	18-Aug	4-Sep	27-Jul	17-Aug	3-Sep	27-Jul	17-Aug	3-Sep	27-Jul	16-Aug	4-Sep	26-Jul	17-Aug	4-Sep	28-Jul	18-Aug	5-Sep	28-Jul	18-Aug	5-Sep	28-Jul	18-Aug	5-Sep	19-Aug				
<b>PHYSICAL</b>																																			
pH	pH units	0.1		7.7	7.7					7.7	7.9	7.5	7.4	7.7	7.4	7.6	7.7	7.5	7.5	7.3	7.5	7.8	7.4					7.3	7.3	7.5	7.5	7.8			
Specific Conductance	µS/cm	1		239	239					144	142	219	221	218	223	226	237	223	226	236	249	304	289	244	250	244					233	227	239	262	251
Residue Nonfilterable (TSS)	mg/L	2		4	4					< 2	2	< 2	3	2	< 2	4	3	< 2	3	4	3	3	4	8	< 2	5	5	< 2	< 2	2	4	4	4	385	
Residue Filterable 1.0u (TDS)	mg/L	20		116	122					48	76	78	116	114	94	122	130	102	140	128	148	158	128	116	130	116	128	116	128	116	128	116	128	116	128
Computed TDS	mg/L			112	113					65	67	104	102	102	106	104	114	106	103	111	116	117	139	136	115	118	115	118	116	118	116	118	117	185	
Turbidity	NTU	0.3		2.7	2.3					0.6	3.1	1.2	0.5	1.3	1.7	2.2	2.3	1.8	2.3	2.6	1.9	1.8	2.4	1.1	4.5	8.3	2.5	2.7	3.2	1.6	2.5	2.6	43.6	96.0	
Hardness Total -T	mg/L	40.2		41.8						30.5	32.1	35.3	36.0	34.2	36.4	37.8	33.0	34.9	38.9	35.7	44.1	44.1	34.9	43.8	41.8	44.3	45.9	38.5	54.0	55.4	38.9	47.2	43.6		
Hardness Total -D	mg/L	40.6		41.3						31.0	31.0	34.2	34.7	35.3	34.3	35.9	31.0	32.8	35.2	38.0	42.9	42.9	37.0	41.2	42.1	36.0	43.9	42.5	40.3	54.1	54.1	38.3	46.5	43.9	
<b>GENERAL INORGANICS</b>																																			
Acidity pH 8.3	mg/L	0.5		0.7	0.9					0.8	1.6	2.4	0.8	0.7	1.6	0.7	0.8	1.4	0.9	0.8	1.3	0.9	1.1	1.1	0.9	0.9	0.8	1.2	1.2	1.2	0.9	0.9	1.3		
Acidity pH 4.5	mg/L	0.5		< 0.5	< 0.5					< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Alkalinity Phen. 8.3 as CaCO3	mg/L	1		< 1	< 1					< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			
Alkalinity Total as CaCO3	mg/L	1		26	26					24	25	21	23	20	19	20	20	21	24	20	18	19	25	26	27	30	26	27	24	24	24	24	42		
Carbonate as CO3=	mg/L			< 0.5	< 0.5					< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
Bicarbonate as HCO3-	mg/L			31.7	31.7					29.3	30.5	25.6	28.0	24.4	24.4	24.4	24.4	25.6	28.0	29.3	29.3	24.4	23.2	23.2	30.5	31.7	32.9	36.6	31.7	32.9	29.3	29.3	51.2		
Hydroxide as OH-	mg/L			< 0.5	< 0.5					< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				
<b>ANIONS</b>																																			
Bromide Dissolved	mg/L	0.1		< 0.1	< 0.1					< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Chloride Dissolved	mg/L	0.5		51.0	50.5					22.9	24.0	45.0	46.8	47.1	53.6	48.5	51.3	54.7	53.0	71.2	67.7	52.3	54.2	46.9	47.1	54.5	54.5	74.1							
Fluoride Dissolved	mg/L	0.01		0.02	0.02					0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
Ion Balance	%			2.4	1.4					5.8	9.0	2.6	2.5	4.0	1.9	-0.9	1.8	-0.5	1.8	0.0	0.1	3.6	0.9	3.1	1.6	1.2	2.4	1.7	1.7	1.7	1.7	1.7			
Total Anions	meq/L	2.00		2.00						1.17	1.23	1.81	1.80	1.83	2.03	1.86	1.95	2.12	2.05	2.50	2.41	2.04	2.12	1.92	1.93	2.13	2.10	3.33							
Total Cations	meq/L	2.10		2.05						1.32	1.25	1.90	1.90	1.98	2.11	1.83	2.02	2.10	2.12	2.50	2.41	2.19	2.16	2.04	2.00	2.18	2.20	3.45							
Computed Conductance	µS/cm	239		241						136	141	216	219	223	243	221	239	250	251	301															



Appendix C3. Mean daily water temperature (°C) and daily fluctuations in Doris, Roberts and Little Roberts outflows, 2003.

Date	Doris Outflow			Roberts Outflow			Little Roberts Outflow		
	Mean	Range (°C)	Fluct.	Mean	Range (°C)	Fluct.	Mean	Range (°C)	Fluct.
27-Jul				<b>10.0</b>	8.3 - 12.7	4.4			
28-Jul	<b>12.1</b>	11.4 - 13.0	1.6	<b>8.0</b>	7.1 - 8.6	1.5	<b>13.2</b>	12.7 - 13.5	0.8
29-Jul	<b>11.3</b>	10.3 - 12.4	2.1	<b>8.2</b>	7.5 - 9.0	1.5	<b>12.0</b>	11.4 - 12.7	1.3
30-Jul	<b>12.5</b>	10.3 - 14.8	4.5	<b>10.2</b>	9.0 - 11.1	2.1	<b>12.5</b>	11.2 - 13.9	2.7
31-Jul	<b>12.3</b>	11.4 - 13.3	1.9	<b>9.6</b>	9.3 - 9.9	0.6	<b>12.3</b>	12.0 - 12.9	0.9
1-Aug	<b>12.3</b>	11.4 - 13.5	2.1	<b>10.3</b>	9.5 - 11.2	1.7	<b>12.3</b>	11.8 - 12.9	1.1
2-Aug	<b>12.2</b>	11.8 - 12.6	0.8	<b>10.4</b>	10.1 - 10.8	0.7	<b>12.1</b>	11.8 - 12.6	0.8
3-Aug	<b>12.6</b>	11.4 - 14.2	2.8	<b>10.9</b>	9.9 - 12.0	2.1	<b>12.3</b>	11.4 - 13.5	2.1
4-Aug	<b>11.3</b>	10.6 - 11.8	1.2	<b>9.9</b>	9.5 - 10.6	1.1	<b>11.3</b>	10.1 - 12.6	2.5
5-Aug	<b>11.2</b>	10.2 - 12.4	2.2	<b>9.5</b>	9.2 - 9.9	0.7	<b>10.1</b>	9.5 - 10.6	1.1
6-Aug	<b>11.3</b>	10.5 - 12.6	2.1	<b>9.5</b>	9.2 - 10.1	0.9	<b>10.5</b>	10.2 - 10.9	0.7
7-Aug	<b>11.2</b>	9.5 - 12.9	3.4	<b>9.5</b>	9.0 - 9.9	0.9	<b>10.3</b>	9.6 - 10.9	1.3
8-Aug	<b>10.9</b>	9.5 - 11.8	2.3	<b>9.6</b>	9.0 - 9.9	0.9	<b>10.5</b>	9.8 - 10.9	1.1
9-Aug	<b>9.3</b>	8.6 - 9.9	1.3	<b>8.4</b>	8.0 - 9.0	1.0	<b>8.5</b>	7.8 - 9.6	1.8
10-Aug	<b>9.7</b>	8.1 - 11.5	3.4	<b>8.3</b>	7.8 - 9.0	1.2	<b>8.2</b>	7.5 - 8.9	1.4
11-Aug	<b>10.9</b>	9.8 - 13.0	3.2	<b>8.5</b>	8.0 - 9.5	1.5	<b>9.4</b>	8.7 - 10.3	1.6
12-Aug	<b>10.2</b>	9.6 - 10.9	1.3	<b>8.5</b>	8.1 - 8.9	0.8	<b>9.2</b>	8.9 - 9.8	0.9
13-Aug	<b>9.5</b>	9.0 - 9.9	0.9	<b>8.2</b>	8.0 - 8.6	0.6	<b>8.8</b>	8.4 - 9.0	0.6
14-Aug	<b>9.6</b>	8.9 - 10.3	1.4	<b>8.3</b>	8.0 - 8.7	0.7	<b>8.3</b>	8.0 - 8.6	0.6
15-Aug	<b>10.4</b>	9.2 - 12.3	3.1	<b>8.9</b>	8.1 - 10.1	2.0	<b>9.2</b>	8.3 - 10.2	1.9
16-Aug	<b>10.0</b>	9.2 - 10.5	1.3	<b>9.0</b>	8.3 - 9.3	1.0	<b>9.3</b>	8.7 - 9.8	1.1
17-Aug	<b>9.4</b>	8.7 - 10.3	1.6	<b>8.3</b>	8.0 - 8.7	0.7	<b>8.6</b>	8.1 - 9.2	1.1
18-Aug	<b>9.7</b>	8.4 - 11.1	2.7	<b>8.3</b>	8.0 - 8.9	0.9	<b>8.6</b>	8.1 - 9.2	1.1
19-Aug	<b>10.4</b>	9.9 - 11.1	1.2	<b>8.9</b>	8.1 - 9.6	1.5	<b>9.6</b>	9.2 - 10.1	0.9
20-Aug	<b>10.2</b>	9.9 - 10.8	0.9	<b>9.2</b>	9.0 - 9.5	0.5	<b>9.8</b>	9.6 - 9.9	0.3
21-Aug	<b>10.0</b>	9.5 - 10.9	1.4	<b>8.9</b>	8.6 - 9.3	0.7	<b>9.6</b>	9.2 - 10.1	0.9
22-Aug	<b>9.1</b>	8.7 - 9.5	0.8	<b>8.2</b>	8.0 - 8.4	0.4	<b>8.5</b>	8.0 - 9.2	1.2
23-Aug	<b>9.3</b>	8.1 - 10.5	2.4	<b>8.3</b>	7.7 - 9.0	1.3	<b>8.6</b>	7.7 - 9.8	2.1
24-Aug	<b>8.9</b>	8.4 - 9.3	0.9	<b>8.2</b>	8.1 - 8.4	0.3	<b>8.4</b>	8.0 - 9.0	1.0
25-Aug	<b>8.9</b>	8.1 - 10.2	2.1	<b>8.3</b>	8.0 - 9.2	1.2	<b>8.2</b>	7.7 - 9.0	1.3
26-Aug	<b>9.2</b>	8.1 - 10.5	2.4	<b>8.4</b>	8.0 - 8.7	0.7	<b>8.5</b>	7.8 - 9.2	1.4
27-Aug	<b>9.5</b>	8.1 - 11.1	3.0	<b>9.0</b>	8.3 - 10.2	1.9	<b>9.2</b>	8.4 - 10.1	1.7
28-Aug	<b>9.8</b>	8.7 - 11.4	2.7	<b>9.1</b>	8.4 - 10.2	1.8	<b>9.0</b>	8.4 - 9.8	1.4
29-Aug	<b>9.4</b>	8.4 - 10.6	2.2	<b>8.7</b>	8.1 - 9.6	1.5	<b>9.1</b>	8.7 - 9.5	0.8
30-Aug	<b>9.5</b>	9.0 - 10.2	1.2	<b>8.6</b>	8.1 - 9.2	1.1	<b>9.4</b>	9.2 - 9.6	0.4
31-Aug	<b>10.0</b>	9.0 - 11.7	2.7	<b>9.2</b>	8.3 - 10.2	1.9	<b>9.8</b>	9.3 - 10.6	1.3
1-Sep	<b>10.5</b>	9.5 - 12.0	2.5	<b>9.5</b>	9.2 - 10.3	1.1	<b>9.8</b>	9.3 - 10.6	1.3
2-Sep	<b>10.8</b>	9.8 - 12.1	2.3	<b>9.3</b>	9.0 - 9.6	0.6	<b>10.3</b>	9.9 - 10.6	0.7
3-Sep	<b>10.6</b>	9.8 - 11.2	1.4	<b>9.4</b>	8.9 - 9.9	1.0	<b>10.3</b>	9.8 - 10.8	1.0
4-Sep	<b>10.2</b>	9.8 - 10.8	1.0	<b>9.6</b>	9.3 - 9.8	0.5	<b>10.2</b>	9.8 - 10.6	0.8
5-Sep	<b>9.7</b>	9.2 - 10.5	1.3	<b>9.2</b>	9.0 - 9.8	0.8	<b>9.5</b>	9.2 - 9.8	0.6
6-Sep	<b>9.5</b>	8.9 - 10.3	1.4	<b>9.2</b>	8.9 - 9.6	0.7	<b>9.4</b>	9.0 - 9.8	0.8
7-Sep	<b>9.3</b>	8.9 - 9.8	0.9	<b>9.1</b>	8.7 - 9.5	0.8	<b>9.1</b>	8.9 - 9.3	0.4
8-Sep	<b>8.7</b>	8.4 - 9.0	0.6	<b>8.4</b>	8.3 - 8.9	0.6	<b>8.2</b>	7.8 - 8.9	1.1
9-Sep	<b>8.7</b>	8.6 - 8.9	0.3	<b>8.4</b>	8.3 - 8.4	0.1	<b>8.1</b>	8.1 - 8.1	0.0
<b>Mean</b>	<b>10.2</b>	<b>8.1 - 14.2</b>	<b>2.0</b>	<b>8.9</b>	<b>7.7 - 12.0</b>	<b>1.1</b>	<b>9.5</b>	<b>7.5 - 13.5</b>	<b>1.2</b>



**APPENDIX D**

**FISH CAPTURE AND LIFE HISTORY DATA**



#### Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
L Rob L	F4	5-Sep	FN		3914	NNST	55													
L Rob L	F3	6-Sep	FN		3958	NNST	60													
L Rob L	F3	6-Sep	FN		3959	NNST	62													
L Rob L	F3	6-Sep	FN		3960	NNST	51													
L Rob L	F3	6-Sep	FN		3961	NNST	54													
L Rob L	G14	2-Sep	GN	1.9	3847	ARCH	108													
L Rob L	G13	4-Sep	GN	1.9	3866	ARCH	248	170	1.11											
L Rob L	G15	6-Sep	GN	1.9	3957	ARCH	105													
L Rob L	G13	2-Sep	GN	1.9	3839	CISC	192	70	0.99											
L Rob L	G13	28-Aug	GN	1.9	3479	LKTR	382													
L Rob L	G13	28-Aug	GN	1.9	3480	LKTR	351	430	0.99											
L Rob L	G15	7-Sep	GN	1.9	3996	LKTR	446	810	0.91											
L Rob L	G15	7-Sep	GN	1.9	3997	LKTR	104													
L Rob L	G13	28-Aug	GN	1.9	3481	LSCS	140													
L Rob L	G13	28-Aug	GN	1.9	3482	LSCS	121													
L Rob L	G13	1-Sep	GN	1.9	3755	LSCS	143	25	0.85	M	2	2								
L Rob Out	E18	15-Aug	EF		1997	ARCH	126													
L Rob Out	E18	15-Aug	EF		1998	FRSC	95													
L Rob Out	E18	15-Aug	EF		1999	NNST	66													
L Rob Out	E18	15-Aug	EF		2000	NNST	63													
L Rob Out	E18	15-Aug	EF		2001	NNST	61													
L Rob Out	E18	15-Aug	EF		2002	NNST	59													
L Rob Out	E18	15-Aug	EF		2003	NNST	56													
L Rob Out	E18	15-Aug	EF		2004	NNST	54													
L Rob Out	E18	15-Aug	EF		2005	NNST	52													
L Rob Out	E18	15-Aug	EF		2006	NNST	51													
L Rob Out	E18	15-Aug	EF		2007	NNST	36													
L Rob Out	E18	15-Aug	EF		2008	NNST	30													
L Rob Out	E17	19-Aug	EF		2365	NNST	58													
Pelvic In	E01	6-Sep	EF		3974	NNST	25													
Pelvic In	E01	6-Sep	EF		3975	NNST	20													
Pelvic In	E01	6-Sep	EF		3976	NNST	27													
Pelvic In	E01	6-Sep	EF		3977	NNST	22													
Pelvic In	E01	6-Sep	EF		3978	NNST	25													
Pelvic In	E01	6-Sep	EF		3979	NNST	27													
Pelvic In	E01	6-Sep	EF		3980	NNST	21													
Pelvic In	E01	6-Sep	EF		3981	NNST	20													
Pelvic In	E01	6-Sep	EF		3982	NNST	27													
Pelvic In	E01	6-Sep	EF		3983	NNST	22													
Pelvic In	E01	6-Sep	EF		3984	NNST	25													
Pelvic Out	E04b	11-Aug	EF		1500	ARCH	206	105	1.20											
Pelvic Out	E04b	11-Aug	EF		1501	ARCH	188	70	1.05											
Pelvic Out	E04b	11-Aug	EF		1502	ARCH	175	55	1.03											
Pelvic Out	E04b	11-Aug	EF		1503	ARCH	165	43	0.96											
Pelvic Out	E04b	11-Aug	EF		1504	ARCH	149	35	1.06											
Pelvic Out	E04b	11-Aug	EF		1505	ARCH	250	110	0.70											
Pelvic Out	E04b	11-Aug	EF		1506	ARCH	135	25	1.02											
Pelvic Out	E04b	11-Aug	EF		1507	ARCH	213	95	0.98											
Pelvic Out	E03	30-Aug	EF		3703	ARCH	125	15	0.77											
Pelvic Out	E04a	1-Sep	EF		3760	ARCH	124	20	1.05											
Pelvic Out	E04a	1-Sep	EF		3761	ARCH	148	30	0.93											
Pelvic Out	E04a	1-Sep	EF		3762	ARCH	140	30	1.09											
Pelvic Out	E04a	1-Sep	EF		3763	ARCH	158	35	0.89											
Pelvic Out	E06	1-Sep	EF		3769	CISC	260	160	0.91											
Pelvic Out	E06	1-Sep	EF		3770	CISC	246	165	1.11											
Pelvic Out	E04b	11-Aug	EF		1497	LKTR	463	1055	1.06											
Pelvic Out	E04b	11-Aug	EF		1498	LKTR	381	530	0.96											
Pelvic Out	E04b	11-Aug	EF		1499	LKTR	396	635	1.02											
Pelvic Out	E03	30-Aug	EF		3679	LKTR	491	1320	1.12											
Pelvic Out	E03	30-Aug	EF		3680	LKTR	441	810	0.94											
Pelvic Out	E03	30-Aug	EF		3681	LKTR	362	515	1.09											
Pelvic Out	E03	30-Aug	EF		3682	LKTR	330													
Pelvic Out	E03	30-Aug	EF		3695	LKTR	426	760	0.98											
Pelvic Out	E04a	1-Sep	EF		3759	LKTR	351	410	0.95											
Pelvic Out	E04b	1-Sep	EF		3764	LKTR	454	1025	1.10	M	2	2								
Pelvic Out	E04b	1-Sep	EF		3765	LKTR	642	2350	0.89											
Pelvic Out	E04b	1-Sep	EF		3766	LKTR	400	755	1.18											
Pelvic Out	E04b	1-Sep	EF		3767	LKTR	430	780	0.98	M	2	2								
Pelvic Out	E04b	1-Sep	EF		3768	LKTR	437	925	1.11	M	2	2								
Pelvic Out	E06	1-Sep	EF		3771	LKTR	298	290	1.10											
Pelvic Out	E03	30-Aug	EF		3694	LKWH	320	380	1.16											
Pelvic Out	E03	30-Aug	EF		3696	LKWH	390	740	1.25											
Pelvic Out	E03	30-Aug	EF		3697	LKWH	410	475	0.69											
Pelvic Out	E03	30-Aug	EF		3699	LKWH	223	130	1.17											
Pelvic Out	E03	30-Aug	EF		3700	LKWH	312	390	1.28											
Pelvic Out	E03	30-Aug	EF		3702	LKWH	323	400	1.19											
Pelvic Out	E03	30-Aug	EF		3683	LSCS	206	85	0.97											
Pelvic Out	E03	30-Aug	EF		3684	LSCS	203	90	1.08											
Pelvic Out	E03	30-Aug	EF		3685	LSCS	220	105	0.99											
Pelvic Out	E03	30-Aug	EF		3686	LSCS	193	65	0.90											
Pelvic Out	E03	30-Aug	EF		3687	LSCS	240	85	0.61											
Pelvic Out	E03	30-Aug	EF		3688	LSCS	204	95	1.12											
Pelvic Out	E03	30-Aug	EF		3689	LSCS	200	70	0.88											
Pelvic Out	E03	30-Aug	EF		3690	LSCS	207	80	0.90											
Pelvic Out	E03	30-Aug	EF		3691	LSCS	209	85	0.93											
Pelvic Out	E03	30-Aug	EF		3692	LSCS	207	105	1.18											
Pelvic Out	E03	30-Aug	EF		3693	LSCS	192	65	0.92											
Pelvic Out	E03	30-Aug	EF		3698	LSCS	231	145	1.18											
Pelvic Out	E03	30-Aug	EF		3701	LSCS	1													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Pelvic Out	E04c	11-Aug	EF		1484	NNST	49													
Pelvic Out	E04c	11-Aug	EF		1485	NNST	42													
Pelvic Out	E04c	11-Aug	EF		1486	NNST	32													
Pelvic Out	E04c	11-Aug	EF		1487	NNST	28													
Pelvic Out	E04c	11-Aug	EF		1488	NNST	26													
Pelvic Out	E04c	11-Aug	EF		1489	NNST	26													
Pelvic Out	E04c	11-Aug	EF		1490	NNST	22													
Pelvic Out	E04c	11-Aug	EF		1491	NNST	21													
Pelvic Out	E04c	11-Aug	EF		1492	NNST	21													
Pelvic Out	E04c	11-Aug	EF		1493	NNST	21													
Pelvic Out	E04c	11-Aug	EF		1494	NNST	20													
Pelvic Out	E04c	11-Aug	EF		1495	NNST	19													
Pelvic Out	E04c	11-Aug	EF		1496	NNST	18													
Pelvic Out	E03	18-Aug	EF		2092	NNST	50													
Pelvic Out	E03	18-Aug	EF		2093	NNST	25													
Pelvic Out	E03	18-Aug	EF		2094	NNST	20													
Pelvic Out	E03	18-Aug	EF		2095	NNST	15													
Pelvic Out	E03	18-Aug	EF		2096	NNST	15													
Pelvic Out	E03	18-Aug	EF		2097	NNST	12													
Pelvic Out	E03	18-Aug	EF		2098	NNST	15													
Pelvic Out	E03	18-Aug	EF		2099	NNST	10													
Pelvic Out	E03	18-Aug	EF		2100	NNST	10													
Pelvic Out	E06	20-Aug	EF		2418	NNST	39													
Pelvic Out	E06	20-Aug	EF		2419	NNST	20													
Pelvic Out	E02	6-Sep	EF		3970	NNST	59													
Pelvic Out	E02	6-Sep	EF		3971	NNST	57													
Pelvic Out	E02	6-Sep	EF		3972	NNST	33													
Pelvic Out	E02	6-Sep	EF		3973	NNST	33													
Rob Bay	B2	9-Aug	BS		1388	FRSC	35													Preserved
Rob Bay	B2	9-Aug	BS		1389	FRSC	27													Preserved
Rob Bay	B2	9-Aug	BS		1390	FRSC	35													Preserved
Rob Bay	B2	9-Aug	BS		1391	FRSC	33													Preserved
Rob Bay	B2	9-Aug	BS		1392	FRSC	29													Preserved
Rob Bay	B2	9-Aug	BS		1393	FRSC	32													Preserved
Rob Bay	B2	9-Aug	BS		1394	FRSC	30													Preserved
Rob Bay	B2	9-Aug	BS		1395	FRSC	32													Preserved
Rob Bay	F1-W	24-Jul	FN		1004	ARCH	647	2905	1.07											
Rob Bay	F1-E	24-Jul	FN		1125	ARCH	743	4525	1.10	M										Kype
Rob Bay	F1-W	28-Jul	FN		1343	ARCH	666	3145	1.06	F	2	1								Seed & residual eggs
Rob Bay	F1-W	11-Aug	FN		1420	ARCH	834	6210	1.07	F										
Rob Bay	F1-W	11-Aug	FN		1421	ARCH	635	2980	1.16	F										
Rob Bay	F1-W	11-Aug	FN		1422	ARCH	568	2100	1.15	F										
Rob Bay	F1-W	11-Aug	FN		1423	ARCH	179	45	0.78											
Rob Bay	F1-E	13-Aug	FN		1641	ARCH	711	3795	1.06	F										
Rob Bay	F1-E	26-Aug	FN		3151	ARCH	198													PHOTO
Rob Bay	F1-W	24-Jul	FN		1030	ARFL	248	175	1.15											
Rob Bay	F1-W	24-Jul	FN		1124	ARFL	250	200	1.28											
Rob Bay	F1-E	28-Jul	FN		1313	ARFL	186	75	1.17											
Rob Bay	F1-E	28-Jul	FN		1314	ARFL	150	35	1.04											
Rob Bay	F1-W	28-Jul	FN		1344	ARFL	250	200	1.28											
Rob Bay	F1-W	28-Jul	FN		1345	ARFL	250	240	1.54											
Rob Bay	F1-W	28-Jul	FN		1346	ARFL	91													
Rob Bay	F1-W	11-Aug	FN		1424	ARFL	217	145	1.42											
Rob Bay	F1-W	11-Aug	FN		1425	ARFL	213	130	1.35											
Rob Bay	F1-W	11-Aug	FN		1426	ARFL	201	110	1.35											
Rob Bay	F1-W	11-Aug	FN		1427	ARFL	200	115	1.44											
Rob Bay	F1-W	11-Aug	FN		1428	ARFL	200	130	1.63											
Rob Bay	F1-W	11-Aug	FN		1429	ARFL	187	90	1.38											
Rob Bay	F1-E	12-Aug	FN		1509	ARFL	209	125	1.37											
Rob Bay	F1-E	13-Aug	FN		1642	ARFL	229	185	1.54											
Rob Bay	F1-E	13-Aug	FN		1643	ARFL	220	145	1.36											
Rob Bay	F1-E	13-Aug	FN		1644	ARFL	211	140	1.49											
Rob Bay	F1-E	13-Aug	FN		1645	ARFL	200	110	1.38											
Rob Bay	F1-E	13-Aug	FN		1646	ARFL	193	105	1.46											
Rob Bay	F1-E	13-Aug	FN		1647	ARFL	190	100	1.46											
Rob Bay	F1-E	13-Aug	FN		1648	ARFL	188	95	1.43											
Rob Bay	F1-E	13-Aug	FN		1649	ARFL	185	80	1.26											
Rob Bay	F1-W	13-Aug	FN		1677	ARFL	220	145	1.36											
Rob Bay	F1-W	13-Aug	FN		1678	ARFL	211	155	1.65											
Rob Bay	F1-W	13-Aug	FN		1679	ARFL	211	125	1.33											
Rob Bay	F1-W	13-Aug	FN		1680	ARFL	208	125	1.39											
Rob Bay	F1-W	13-Aug	FN		1681	ARFL	204	125	1.47											
Rob Bay	F1-W	13-Aug	FN		1682	ARFL	202	125	1.52											
Rob Bay	F1-W	13-Aug	FN		1683	ARFL	200	110	1.38											
Rob Bay	F1-W	13-Aug	FN		1684	ARFL	185	85	1.34											
Rob Bay	F1-W	13-Aug	FN		1685	ARFL	114	20	1.35											
Rob Bay	F2-W	15-Aug	FN		1783	ARFL	217	150	1.47											
Rob Bay	F2-W	15-Aug	FN		1784	ARFL	213	150	1.55											
Rob Bay	F2-W	15-Aug	FN		1785	ARFL	209	125	1.37											
Rob Bay	F2-W	15-Aug	FN		1786	ARFL	197	115	1.50											
Rob Bay	F2-W	15-Aug	FN		1787	ARFL	195	70	0.94											
Rob Bay	F2-W	15-Aug	FN		1788	ARFL	189	105	1.56											
Rob Bay	F2-W	15-Aug	FN		1789	ARFL	114	15	1.01											
Rob Bay	F2-E	15-Aug	FN		1924	ARFL	217	160	1.57											
Rob Bay	F2-E	15-Aug	FN		1925	ARFL	215	145	1.46											
Rob Bay	F2-E	15-Aug	FN		1926	ARFL	215	150	1.51											
Rob Bay	F2-E	15-Aug	FN		1927	ARFL	213	140	1.45											
Rob Bay	F2-E	15-Aug	FN		1928	ARFL	213	155	1.60											
Rob Bay	F2-E	15-Aug	FN		1929	ARFL	212	140	1.47					</						

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-E	15-Aug	FN		1933	ARFL	207	135	1.52											
Rob Bay	F2-E	15-Aug	FN		1934	ARFL	206	110	1.26											
Rob Bay	F2-E	15-Aug	FN		1935	ARFL	204	110	1.30											
Rob Bay	F2-E	15-Aug	FN		1936	ARFL	204	120	1.41											
Rob Bay	F2-E	15-Aug	FN		1937	ARFL	203	125	1.49											
Rob Bay	F2-E	15-Aug	FN		1938	ARFL	201	115	1.42											
Rob Bay	F2-E	15-Aug	FN		1939	ARFL	199	105	1.33											
Rob Bay	F2-E	15-Aug	FN		1940	ARFL	198	110	1.42											
Rob Bay	F2-E	15-Aug	FN		1941	ARFL	197	105	1.37											
Rob Bay	F2-E	15-Aug	FN		1942	ARFL	188	90	1.35											
Rob Bay	F2-E	15-Aug	FN		1943	ARFL	173	75	1.45											
Rob Bay	F2-W	19-Aug	FN		2133	ARFL	295	445	1.73											
Rob Bay	F2-W	19-Aug	FN		2134	ARFL	214	135	1.38											
Rob Bay	F2-W	19-Aug	FN		2135	ARFL	206	135	1.54											
Rob Bay	F2-W	19-Aug	FN		2136	ARFL	204	125	1.47											
Rob Bay	F2-W	19-Aug	FN		2137	ARFL	200	105	1.31											
Rob Bay	F2-E	19-Aug	FN		2217	ARFL	227	155	1.33											
Rob Bay	F2-E	19-Aug	FN		2218	ARFL	207	140	1.58											
Rob Bay	F2-E	19-Aug	FN		2219	ARFL	204	140	1.65											
Rob Bay	F2-E	19-Aug	FN		2220	ARFL	202	110	1.33											
Rob Bay	F2-E	19-Aug	FN		2221	ARFL	202	110	1.33											
Rob Bay	F2-E	19-Aug	FN		2222	ARFL	152	45	1.28											
Rob Bay	F2-E	19-Aug	FN		2223	ARFL	104													
Rob Bay	F2-E	22-Aug	FN		2482	ARFL	221													
Rob Bay	F2-E	22-Aug	FN		2483	ARFL	220													
Rob Bay	F2-E	22-Aug	FN		2484	ARFL	220													
Rob Bay	F2-E	22-Aug	FN		2485	ARFL	218													
Rob Bay	F2-E	22-Aug	FN		2486	ARFL	217													
Rob Bay	F2-E	22-Aug	FN		2487	ARFL	216													
Rob Bay	F2-E	22-Aug	FN		2488	ARFL	215													
Rob Bay	F2-E	22-Aug	FN		2489	ARFL	213													
Rob Bay	F2-E	22-Aug	FN		2490	ARFL	212													
Rob Bay	F2-E	22-Aug	FN		2491	ARFL	212													
Rob Bay	F2-E	22-Aug	FN		2492	ARFL	210													
Rob Bay	F2-E	22-Aug	FN		2493	ARFL	210													
Rob Bay	F2-E	22-Aug	FN		2494	ARFL	208													
Rob Bay	F2-E	22-Aug	FN		2495	ARFL	208													
Rob Bay	F2-E	22-Aug	FN		2496	ARFL	208													
Rob Bay	F2-E	22-Aug	FN		2497	ARFL	205													
Rob Bay	F2-E	22-Aug	FN		2498	ARFL	204													
Rob Bay	F2-E	22-Aug	FN		2499	ARFL	202													
Rob Bay	F2-E	22-Aug	FN		2500	ARFL	200													
Rob Bay	F2-E	22-Aug	FN		2501	ARFL	192													
Rob Bay	F2-E	22-Aug	FN		2502	ARFL	161													
Rob Bay	F2-E	22-Aug	FN		2503	ARFL	128													
Rob Bay	F2-E	22-Aug	FN		2504	ARFL	82													
Rob Bay	F2-E	22-Aug	FN		2505	ARFL	80													
Rob Bay	F2-E	22-Aug	FN		2506	ARFL	76													
Rob Bay	F2-E	22-Aug	FN		2507	ARFL	69													
Rob Bay	F2-W	22-Aug	FN		2674	ARFL	220													
Rob Bay	F2-W	22-Aug	FN		2675	ARFL	146													
Rob Bay	F2-W	22-Aug	FN		2676	ARFL	129													
Rob Bay	F2-W	22-Aug	FN		2677	ARFL	112													
Rob Bay	F1-E	26-Aug	FN		3152	ARFL	196													
Rob Bay	F1-E	27-Aug	FN		3229	ARFL	184													
Rob Bay	F1-W	29-Aug	FN		3535	ARFL	209													
Rob Bay	F1-E	24-Jul	FN		1136	CAPE	153				M									
Rob Bay	F1-E	24-Jul	FN		1137	CAPE	146				M									
Rob Bay	F1-E	24-Jul	FN		1138	CAPE	151				M									
Rob Bay	F1-E	24-Jul	FN		1139	CAPE	153				M									
Rob Bay	F1-E	24-Jul	FN		1140	CAPE	142				M									
Rob Bay	F1-E	24-Jul	FN		1141	CAPE	138				M									
Rob Bay	F1-E	24-Jul	FN		1142	CAPE	145				M									
Rob Bay	F1-E	24-Jul	FN		1143	CAPE	152				M									
Rob Bay	F1-E	24-Jul	FN		1144	CAPE	149				M									
Rob Bay	F1-E	24-Jul	FN		1145	CAPE	141				M									
Rob Bay	F1-E	24-Jul	FN		1146	CAPE	146				M									
Rob Bay	F1-E	24-Jul	FN		1147	CAPE	139				M									
Rob Bay	F1-E	24-Jul	FN		1148	CAPE	149				M									
Rob Bay	F1-E	24-Jul	FN		1149	CAPE	150				M									
Rob Bay	F1-E	24-Jul	FN		1150	CAPE	145				M									
Rob Bay	F1-E	24-Jul	FN		1151	CAPE	150				M									
Rob Bay	F1-E	24-Jul	FN		1152	CAPE	148				M									
Rob Bay	F1-E	24-Jul	FN		1153	CAPE	147				M									
Rob Bay	F1-E	24-Jul	FN		1154	CAPE	143				M									
Rob Bay	F1-E	24-Jul	FN		1155	CAPE	155				M									
Rob Bay	F1-E	24-Jul	FN		1156	CAPE	140				M									
Rob Bay	F1-E	24-Jul	FN		1157	CAPE	150				M									
Rob Bay	F1-E	24-Jul	FN		1158	CAPE	151				M									
Rob Bay	F1-E	24-Jul	FN		1159	CAPE	149				M									
Rob Bay	F1-E	24-Jul	FN		1160	CAPE	150				M									
Rob Bay	F1-E	24-Jul	FN		1161	CAPE	150				M									
Rob Bay	F1-E	24-Jul	FN		1162	CAPE	148				M									
Rob Bay	F1-E	24-Jul	FN		1163	CAPE	144				M									
Rob Bay	F1-E	24-Jul	FN		1164	CAPE	153				M									
Rob Bay	F1-E	24-Jul	FN		1165	CAPE	138				M									
Rob Bay	F1-E	24-Jul	FN		1166	CAPE	132				F									
Rob Bay	F1-E	24-Jul	FN		1167	CAPE	131				F									
Rob Bay	F1-E	24-Jul	FN		1168	CAPE	133				F									
Rob Bay	F1-E	24-Jul	FN		1169	CAPE	129				F									
Rob Bay	F1-E	24-Jul	FN		1170	CAPE	125				F									

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments
																	% Full	Contents	
Rob Bay	F1-E	24-Jul	FN	1172	CAPE	138				F									
Rob Bay	F1-E	24-Jul	FN	1173	CAPE	139				F									
Rob Bay	F1-E	24-Jul	FN	1174	CAPE	136				F									
Rob Bay	F1-E	24-Jul	FN	1175	CAPE	130				F									
Rob Bay	F1-E	24-Jul	FN	1176	CAPE	133				F									
Rob Bay	F1-E	24-Jul	FN	1177	CAPE	142				F									
Rob Bay	F1-E	24-Jul	FN	1178	CAPE	126				F									
Rob Bay	F1-E	24-Jul	FN	1179	CAPE	135				F									
Rob Bay	F1-E	24-Jul	FN	1180	CAPE	120				F									
Rob Bay	F1-E	24-Jul	FN	1181	CAPE	118				F									
Rob Bay	F1-E	24-Jul	FN	1182	CAPE	130				F									
Rob Bay	F1-E	24-Jul	FN	1183	CAPE	120				F									
Rob Bay	F1-E	24-Jul	FN	1184	CAPE	137				F									
Rob Bay	F1-E	24-Jul	FN	1185	CAPE	122				F									
Rob Bay	F1-E	24-Jul	FN	1186	CAPE	137				F									
Rob Bay	F1-E	24-Jul	FN	1187	CAPE	130				F									
Rob Bay	F1-E	24-Jul	FN	1188	CAPE	133				F									
Rob Bay	F1-E	24-Jul	FN	1189	CAPE	126				F									
Rob Bay	F1-E	24-Jul	FN	1190	CAPE	138				F									
Rob Bay	F1-E	24-Jul	FN	1191	CAPE	130				F									
Rob Bay	F1-E	24-Jul	FN	1192	CAPE	125				F									
Rob Bay	F1-E	24-Jul	FN	1193	CAPE	120				F									
Rob Bay	F1-E	24-Jul	FN	1194	CAPE	129				F									
Rob Bay	F1-E	24-Jul	FN	1195	CAPE	118				F									
Rob Bay	F1-E	28-Jul	FN	1315	CAPE	158				M									
Rob Bay	F1-E	28-Jul	FN	1316	CAPE	156				M									
Rob Bay	F1-E	28-Jul	FN	1317	CAPE	156				M									
Rob Bay	F1-E	28-Jul	FN	1318	CAPE	148				M									
Rob Bay	F1-E	28-Jul	FN	1319	CAPE	145				M									
Rob Bay	F1-E	28-Jul	FN	1320	CAPE	143				M									
Rob Bay	F1-E	28-Jul	FN	1321	CAPE	142				M									
Rob Bay	F1-E	28-Jul	FN	1322	CAPE	142				M									
Rob Bay	F1-E	28-Jul	FN	1323	CAPE	138				M									
Rob Bay	F1-E	28-Jul	FN	1324	CAPE	138				M									
Rob Bay	F1-E	28-Jul	FN	1325	CAPE	137				M									
Rob Bay	F1-E	28-Jul	FN	1326	CAPE	136				M									
Rob Bay	F1-E	28-Jul	FN	1327	CAPE	135				M									
Rob Bay	F1-E	28-Jul	FN	1328	CAPE	133				M									
Rob Bay	F1-E	28-Jul	FN	1332	CAPE	132				F									
Rob Bay	F1-E	28-Jul	FN	1333	CAPE	132				F									
Rob Bay	F1-E	28-Jul	FN	1334	CAPE	131				F									
Rob Bay	F1-E	28-Jul	FN	1335	CAPE	123				F									
Rob Bay	F1-W	11-Aug	FN	1430	CISC	441	985	1.15											
Rob Bay	F1-E	11-Aug	FN	1448	CISC	419	1010	1.37		F	2	2							
Rob Bay	F1-E	12-Aug	FN	1510	CISC	382	625	1.12											
Rob Bay	F1-E	13-Aug	FN	1650	CISC	405	895	1.35											
Rob Bay	F2-E	15-Aug	FN	1944	CISC	87													
Rob Bay	F1-W	13-Aug	FN	1686	FRSC	118	10	0.61											
Rob Bay	F1-W	13-Aug	FN	1687	FRSC	105	15	1.30											
Rob Bay	F1-W	13-Aug	FN	1688	FRSC	75													
Rob Bay	F2-E	15-Aug	FN	1945	FRSC	222	95	0.87											
Rob Bay	F2-E	15-Aug	FN	1946	FRSC	112													
Rob Bay	F2-E	19-Aug	FN	2224	FRSC	130													
Rob Bay	F2-E	22-Aug	FN	2508	FRSC	100													
Rob Bay	F2-W	22-Aug	FN	2678	FRSC	122													
Rob Bay	F1-E	29-Aug	FN	3542	FRSC	115													
Rob Bay	F1-W	12-Aug	FN	1508	GRCD	586	2375	1.18											
Rob Bay	F1-W	24-Jul	FN	1028	LHDB	335	575	1.53											
Rob Bay	F1-W	24-Jul	FN	1001	LKTR	677	3280	1.06											
Rob Bay	F1-W	24-Jul	FN	1002	LKTR	597	2590	1.22											
Rob Bay	F1-W	24-Jul	FN	1003	LKTR	748	3590	0.86											
Rob Bay	F1-E	24-Jul	FN	1126	LKTR	908	7730	1.03											
Rob Bay	F1-E	24-Jul	FN	1127	LKTR	808	6315	1.20											
Rob Bay	F1-E	28-Jul	FN	1329	LKTR	510	1440	1.09											
Rob Bay	F1-E	28-Jul	FN	1330	LKTR	447	1075	1.20											
Rob Bay	F1-W	28-Jul	FN	1336	LKTR	630	2855	1.14											
Rob Bay	F1-E	11-Aug	FN	1449	LKTR	614	2830	1.22											
Rob Bay	F1-E	11-Aug	FN	1450	LKTR	488	1280	1.10											
Rob Bay	F1-E	12-Aug	FN	1511	LKTR	461	955	0.97											
Rob Bay	F1-E	12-Aug	FN	1512	LKTR	418	815	1.12											
Rob Bay	F1-E	13-Aug	FN	1651	LKTR	318	265	0.82											
Rob Bay	F1-W	13-Aug	FN	1689	LKTR	387	545	0.94											
Rob Bay	F1-E	13-Aug	FN	1652	LSCS	78													
Rob Bay	F1-E	26-Aug	FN	3153	LSCS	203													
Rob Bay	F1-W	24-Jul	FN	1005	SFCD	449	740	0.82											
Rob Bay	F1-W	24-Jul	FN	1006	SFCD	343	350	0.87											
Rob Bay	F1-W	24-Jul	FN	1007	SFCD	362	400	0.84											
Rob Bay	F1-W	24-Jul	FN	1008	SFCD	410	585	0.85											
Rob Bay	F1-W	24-Jul	FN	1009	SFCD	376	555	1.04											
Rob Bay	F1-W	24-Jul	FN	1010	SFCD	410	585	0.85											
Rob Bay	F1-W	24-Jul	FN	1011	SFCD	407	710	1.05											
Rob Bay	F1-W	24-Jul	FN	1012	SFCD	368	420	0.84											
Rob Bay	F1-W	24-Jul	FN	1013	SFCD	410	590	0.86											
Rob Bay	F1-W	24-Jul	FN	1014	SFCD	369	460	0.92											
Rob Bay	F1-W	24-Jul	FN	1015	SFCD	366	405	0.83											
Rob Bay	F1-W	24-Jul	FN	1016	SFCD	315	240	0.77											
Rob Bay	F1-W	24-Jul	FN	1017	SFCD	312	235	0.77											
Rob Bay	F1-W	24-Jul	FN	1018	SFCD	369	400	0.80											
Rob Bay	F1-W	24-Jul	FN	1019	SFCD	403	495	0.76											
Rob Bay	F1-W	24-Jul	FN	1020	SFCD	365	395	0.81											
Rob Bay	F1-W	24-Jul	FN	1021	SFCD	342	340	0.85											
Rob Bay	F1-W	24-Jul	FN	1022	SFCD	387	400	0.69											

0

photo

Blind left eye

Tagged 28 Aug 02 in RO FL=428 Wt=715

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-W	24-Jul	FN		1023	SFCD	315	290	0.93					Grn	3023					
Rob Bay	F1-W	24-Jul	FN		1024	SFCD	354	410	0.92					Grn	3024					
Rob Bay	F1-W	24-Jul	FN		1025	SFCD	359	435	0.94					Grn	3025					
Rob Bay	F1-W	24-Jul	FN		1026	SFCD	420	595	0.80					Grn	3026					
Rob Bay	F1-W	24-Jul	FN		1027	SFCD	378	450	0.83					Grn	3027					
Rob Bay	F1-W	24-Jul	FN		1029	SFCD	275	175	0.84											
Rob Bay	F1-W	24-Jul	FN		1031	SFCD														
Rob Bay	F1-W	24-Jul	FN		1032	SFCD														
Rob Bay	F1-W	24-Jul	FN		1033	SFCD														
Rob Bay	F1-W	24-Jul	FN		1034	SFCD														
Rob Bay	F1-W	24-Jul	FN		1035	SFCD														
Rob Bay	F1-W	24-Jul	FN		1036	SFCD														
Rob Bay	F1-W	24-Jul	FN		1037	SFCD														
Rob Bay	F1-W	24-Jul	FN		1038	SFCD														
Rob Bay	F1-W	24-Jul	FN		1039	SFCD														
Rob Bay	F1-W	24-Jul	FN		1040	SFCD														
Rob Bay	F1-W	24-Jul	FN		1041	SFCD														
Rob Bay	F1-W	24-Jul	FN		1042	SFCD														
Rob Bay	F1-W	24-Jul	FN		1043	SFCD														
Rob Bay	F1-W	24-Jul	FN		1044	SFCD														
Rob Bay	F1-W	24-Jul	FN		1045	SFCD														
Rob Bay	F1-W	24-Jul	FN		1046	SFCD														
Rob Bay	F1-W	24-Jul	FN		1047	SFCD														
Rob Bay	F1-W	24-Jul	FN		1048	SFCD														
Rob Bay	F1-W	24-Jul	FN		1049	SFCD														
Rob Bay	F1-W	24-Jul	FN		1050	SFCD														
Rob Bay	F1-W	24-Jul	FN		1051	SFCD														
Rob Bay	F1-W	24-Jul	FN		1052	SFCD														
Rob Bay	F1-W	24-Jul	FN		1053	SFCD														
Rob Bay	F1-W	24-Jul	FN		1054	SFCD														
Rob Bay	F1-W	24-Jul	FN		1055	SFCD														
Rob Bay	F1-W	24-Jul	FN		1056	SFCD														
Rob Bay	F1-W	24-Jul	FN		1057	SFCD														
Rob Bay	F1-W	24-Jul	FN		1058	SFCD														
Rob Bay	F1-W	24-Jul	FN		1059	SFCD														
Rob Bay	F1-W	24-Jul	FN		1060	SFCD														
Rob Bay	F1-W	24-Jul	FN		1061	SFCD														
Rob Bay	F1-W	24-Jul	FN		1062	SFCD														
Rob Bay	F1-W	24-Jul	FN		1063	SFCD														
Rob Bay	F1-W	24-Jul	FN		1064	SFCD														
Rob Bay	F1-W	24-Jul	FN		1065	SFCD														
Rob Bay	F1-W	24-Jul	FN		1066	SFCD														
Rob Bay	F1-W	24-Jul	FN		1067	SFCD														
Rob Bay	F1-W	24-Jul	FN		1068	SFCD														
Rob Bay	F1-W	24-Jul	FN		1069	SFCD														
Rob Bay	F1-W	24-Jul	FN		1070	SFCD														
Rob Bay	F1-W	24-Jul	FN		1071	SFCD														
Rob Bay	F1-W	24-Jul	FN		1072	SFCD														
Rob Bay	F1-W	24-Jul	FN		1073	SFCD														
Rob Bay	F1-W	24-Jul	FN		1074	SFCD														
Rob Bay	F1-W	24-Jul	FN		1075	SFCD														
Rob Bay	F1-W	24-Jul	FN		1076	SFCD														
Rob Bay	F1-W	24-Jul	FN		1077	SFCD														
Rob Bay	F1-W	24-Jul	FN		1078	SFCD														
Rob Bay	F1-W	24-Jul	FN		1079	SFCD														
Rob Bay	F1-W	24-Jul	FN		1080	SFCD														
Rob Bay	F1-W	24-Jul	FN		1081	SFCD														
Rob Bay	F1-W	24-Jul	FN		1082	SFCD														
Rob Bay	F1-W	24-Jul	FN		1083	SFCD														
Rob Bay	F1-W	24-Jul	FN		1084	SFCD														
Rob Bay	F1-W	24-Jul	FN		1085	SFCD														
Rob Bay	F1-W	24-Jul	FN		1086	SFCD														
Rob Bay	F1-W	24-Jul	FN		1087	SFCD														
Rob Bay	F1-W	24-Jul	FN		1088	SFCD														
Rob Bay	F1-W	24-Jul	FN		1089	SFCD														
Rob Bay	F1-W	24-Jul	FN		1090	SFCD														
Rob Bay	F1-W	24-Jul	FN		1091	SFCD														
Rob Bay	F1-W	24-Jul	FN		1092	SFCD														
Rob Bay	F1-W	24-Jul	FN		1093	SFCD														
Rob Bay	F1-W	24-Jul	FN		1094	SFCD														
Rob Bay	F1-W	24-Jul	FN		1095	SFCD														
Rob Bay	F1-W	24-Jul	FN		1096	SFCD														
Rob Bay	F1-W	24-Jul	FN		1097	SFCD														
Rob Bay	F1-W	24-Jul	FN		1098	SFCD														
Rob Bay	F1-W	24-Jul	FN		1099	SFCD														
Rob Bay	F1-W	24-Jul	FN		1100	SFCD														
Rob Bay	F1-W	24-Jul	FN		1101	SFCD														
Rob Bay	F1-W	24-Jul	FN		1102	SFCD														
Rob Bay	F1-W	24-Jul	FN		1103	SFCD														
Rob Bay	F1-W	24-Jul	FN		1104	SFCD														
Rob Bay	F1-W	24-Jul	FN		1105	SFCD														
Rob Bay	F1-W	24-Jul	FN		1106	SFCD														
Rob Bay	F1-W	24-Jul	FN		1107	SFCD														
Rob Bay	F1-W	24-Jul	FN		1108	SFCD														
Rob Bay	F1-W	24-Jul	FN		1109	SFCD														
Rob Bay	F1-W	24-Jul	FN		1110	SFCD														
Rob Bay	F1-W	24-Jul	FN		1111	SFCD														
Rob Bay	F1-W	24-Jul	FN		1112	SFCD														
Rob Bay	F1-W	24-Jul	FN		1113	SFCD														
Rob Bay	F1-W	24-Jul	FN		1114	SFCD														
Rob Bay	F1-W	24-Jul	FN		1115	SFCD														
Rob Bay	F1-W	24-Jul	FN		1116	SFCD														

#### Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-E	13-Aug	FN		1665	SFCD	101													
Rob Bay	F1-E	13-Aug	FN		1666	SFCD	100													
Rob Bay	F1-E	13-Aug	FN		1667	SFCD	99													
Rob Bay	F1-E	13-Aug	FN		1668	SFCD	99													
Rob Bay	F1-E	13-Aug	FN		1669	SFCD	97													
Rob Bay	F1-E	13-Aug	FN		1670	SFCD	97													
Rob Bay	F1-E	13-Aug	FN		1671	SFCD	97													
Rob Bay	F1-E	13-Aug	FN		1672	SFCD	96													
Rob Bay	F1-E	13-Aug	FN		1673	SFCD	95													
Rob Bay	F1-E	13-Aug	FN		1674	SFCD	93													
Rob Bay	F1-E	13-Aug	FN		1675	SFCD	90													
Rob Bay	F1-E	13-Aug	FN		1676	SFCD	89													
Rob Bay	F1-W	13-Aug	FN		1690	SFCD	361													
Rob Bay	F1-W	13-Aug	FN		1691	SFCD	284	405	0.86											
Rob Bay	F1-W	13-Aug	FN		1692	SFCD	174	170	0.74											
Rob Bay	F1-W	13-Aug	FN		1693	SFCD	172													
Rob Bay	F1-W	13-Aug	FN		1694	SFCD	170													
Rob Bay	F1-W	13-Aug	FN		1695	SFCD	164													
Rob Bay	F1-W	13-Aug	FN		1696	SFCD	161													
Rob Bay	F1-W	13-Aug	FN		1697	SFCD	160													
Rob Bay	F1-W	13-Aug	FN		1698	SFCD	160													
Rob Bay	F1-W	13-Aug	FN		1699	SFCD	159													
Rob Bay	F1-W	13-Aug	FN		1700	SFCD	156													
Rob Bay	F1-W	13-Aug	FN		1701	SFCD	156													
Rob Bay	F1-W	13-Aug	FN		1702	SFCD	154													
Rob Bay	F1-W	13-Aug	FN		1703	SFCD	153													
Rob Bay	F1-W	13-Aug	FN		1704	SFCD	153													
Rob Bay	F1-W	13-Aug	FN		1705	SFCD	121													
Rob Bay	F1-W	13-Aug	FN		1706	SFCD	116													
Rob Bay	F1-W	13-Aug	FN		1707	SFCD	115													
Rob Bay	F1-W	13-Aug	FN		1708	SFCD	112													
Rob Bay	F1-W	13-Aug	FN		1709	SFCD	112													
Rob Bay	F1-W	13-Aug	FN		1710	SFCD	111													
Rob Bay	F1-W	13-Aug	FN		1711	SFCD	111													
Rob Bay	F1-W	13-Aug	FN		1712	SFCD	110													
Rob Bay	F1-W	13-Aug	FN		1713	SFCD	110													
Rob Bay	F1-W	13-Aug	FN		1714	SFCD	109													
Rob Bay	F1-W	13-Aug	FN		1715	SFCD	108													
Rob Bay	F1-W	13-Aug	FN		1716	SFCD	108													
Rob Bay	F1-W	13-Aug	FN		1717	SFCD	108													
Rob Bay	F1-W	13-Aug	FN		1718	SFCD	106													
Rob Bay	F1-W	13-Aug	FN		1719	SFCD	106													
Rob Bay	F1-W	13-Aug	FN		1720	SFCD	104													
Rob Bay	F1-W	13-Aug	FN		1721	SFCD	104													
Rob Bay	F1-W	13-Aug	FN		1722	SFCD	103													
Rob Bay	F1-W	13-Aug	FN		1723	SFCD	103													
Rob Bay	F1-W	13-Aug	FN		1724	SFCD	102													
Rob Bay	F1-W	13-Aug	FN		1725	SFCD	102													
Rob Bay	F1-W	13-Aug	FN		1726	SFCD	102													
Rob Bay	F1-W	13-Aug	FN		1727	SFCD	102													
Rob Bay	F1-W	13-Aug	FN		1728	SFCD	100													
Rob Bay	F1-W	13-Aug	FN		1729	SFCD	100													
Rob Bay	F1-W	13-Aug	FN		1730	SFCD	99													
Rob Bay	F1-W	13-Aug	FN		1731	SFCD	99													
Rob Bay	F1-W	13-Aug	FN		1732	SFCD	97													
Rob Bay	F1-W	13-Aug	FN		1733	SFCD	97													
Rob Bay	F1-W	13-Aug	FN		1734	SFCD	94													
Rob Bay	F1-W	13-Aug	FN		1735	SFCD	94													
Rob Bay	F1-W	13-Aug	FN		1736	SFCD	91													
Rob Bay	F1-W	13-Aug	FN		1737	SFCD	91													
Rob Bay	F1-W	13-Aug	FN		1738	SFCD	91													
Rob Bay	F2-W	15-Aug	FN		1790	SFCD	220													
Rob Bay	F2-W	15-Aug	FN		1791	SFCD	184													
Rob Bay	F2-W	15-Aug	FN		1792	SFCD	180													
Rob Bay	F2-W	15-Aug	FN		1793	SFCD	177													
Rob Bay	F2-W	15-Aug	FN		1794	SFCD	176													
Rob Bay	F2-W	15-Aug	FN		1795	SFCD	176													
Rob Bay	F2-W	15-Aug	FN		1796	SFCD	176													
Rob Bay	F2-W	15-Aug	FN		1797	SFCD	174													
Rob Bay	F2-W	15-Aug	FN		1798	SFCD	173													
Rob Bay	F2-W	15-Aug	FN		1799	SFCD	171													
Rob Bay	F2-W	15-Aug	FN		1800	SFCD	171													
Rob Bay	F2-W	15-Aug	FN		1801	SFCD	170													
Rob Bay	F2-W	15-Aug	FN		1802	SFCD	170													
Rob Bay	F2-W	15-Aug	FN		1803	SFCD	169													
Rob Bay	F2-W	15-Aug	FN		1804	SFCD	169													
Rob Bay	F2-W	15-Aug	FN		1805	SFCD	169													
Rob Bay	F2-W	15-Aug	FN		1806	SFCD	168													
Rob Bay	F2-W	15-Aug	FN		1807	SFCD	168													
Rob Bay	F2-W	15-Aug	FN		1808	SFCD	168													
Rob Bay	F2-W	15-Aug	FN		1809	SFCD	168													
Rob Bay	F2-W	15-Aug	FN		1810	SFCD	168													
Rob Bay	F2-W	15-Aug	FN		1811	SFCD	166													
Rob Bay	F2-W	15-Aug	FN		1812	SFCD	165													
Rob Bay	F2-W	15-Aug	FN		1813	SFCD	165													
Rob Bay	F2-W	15-Aug	FN		1814	SFCD	165													
Rob Bay	F2-W	15-Aug	FN		1815	SFCD	164													
Rob Bay	F2-W	15-Aug	FN		1816	SFCD	163													
Rob Bay	F2-W	15-Aug	FN		1817	SFCD	163													
Rob Bay	F2-W	15-Aug	FN		1818	SFCD	163													
Rob Bay	F2-W	15-Aug	FN		1819	SFCD	161													
Rob Bay	F2-W	15-Aug	FN		1820	SFCD	160													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-W	15-Aug	FN		1821	SFCD	160													
Rob Bay	F2-W	15-Aug	FN		1822	SFCD	159													
Rob Bay	F2-W	15-Aug	FN		1823	SFCD	159													
Rob Bay	F2-W	15-Aug	FN		1824	SFCD	159													
Rob Bay	F2-W	15-Aug	FN		1825	SFCD	159													
Rob Bay	F2-W	15-Aug	FN		1826	SFCD	159													
Rob Bay	F2-W	15-Aug	FN		1827	SFCD	158													
Rob Bay	F2-W	15-Aug	FN		1828	SFCD	158													
Rob Bay	F2-W	15-Aug	FN		1829	SFCD	157													
Rob Bay	F2-W	15-Aug	FN		1830	SFCD	157													
Rob Bay	F2-W	15-Aug	FN		1831	SFCD	157													
Rob Bay	F2-W	15-Aug	FN		1832	SFCD	157													
Rob Bay	F2-W	15-Aug	FN		1833	SFCD	156													
Rob Bay	F2-W	15-Aug	FN		1834	SFCD	155													
Rob Bay	F2-W	15-Aug	FN		1835	SFCD	154													
Rob Bay	F2-W	15-Aug	FN		1836	SFCD	152													
Rob Bay	F2-W	15-Aug	FN		1837	SFCD	148													
Rob Bay	F2-W	15-Aug	FN		1838	SFCD	148													
Rob Bay	F2-W	15-Aug	FN		1839	SFCD	145													
Rob Bay	F2-W	15-Aug	FN		1840	SFCD	144													
Rob Bay	F2-W	15-Aug	FN		1841	SFCD	144													
Rob Bay	F2-W	15-Aug	FN		1842	SFCD	142													
Rob Bay	F2-W	15-Aug	FN		1843	SFCD	139													
Rob Bay	F2-W	15-Aug	FN		1844	SFCD	137													
Rob Bay	F2-W	15-Aug	FN		1845	SFCD	135													
Rob Bay	F2-W	15-Aug	FN		1846	SFCD	134													
Rob Bay	F2-W	15-Aug	FN		1847	SFCD	126													
Rob Bay	F2-W	15-Aug	FN		1848	SFCD	122													
Rob Bay	F2-W	15-Aug	FN		1849	SFCD	122													
Rob Bay	F2-W	15-Aug	FN		1850	SFCD	117													
Rob Bay	F2-W	15-Aug	FN		1851	SFCD	116													
Rob Bay	F2-W	15-Aug	FN		1852	SFCD	115													
Rob Bay	F2-W	15-Aug	FN		1853	SFCD	115													
Rob Bay	F2-W	15-Aug	FN		1854	SFCD	115													
Rob Bay	F2-W	15-Aug	FN		1855	SFCD	114													
Rob Bay	F2-W	15-Aug	FN		1856	SFCD	114													
Rob Bay	F2-W	15-Aug	FN		1857	SFCD	114													
Rob Bay	F2-W	15-Aug	FN		1858	SFCD	114													
Rob Bay	F2-W	15-Aug	FN		1859	SFCD	114													
Rob Bay	F2-W	15-Aug	FN		1860	SFCD	113													
Rob Bay	F2-W	15-Aug	FN		1861	SFCD	112													
Rob Bay	F2-W	15-Aug	FN		1862	SFCD	112													
Rob Bay	F2-W	15-Aug	FN		1863	SFCD	112													
Rob Bay	F2-W	15-Aug	FN		1864	SFCD	112													
Rob Bay	F2-W	15-Aug	FN		1865	SFCD	112													
Rob Bay	F2-W	15-Aug	FN		1866	SFCD	111													
Rob Bay	F2-W	15-Aug	FN		1867	SFCD	111													
Rob Bay	F2-W	15-Aug	FN		1868	SFCD	111													
Rob Bay	F2-W	15-Aug	FN		1869	SFCD	110													
Rob Bay	F2-W	15-Aug	FN		1870	SFCD	110													
Rob Bay	F2-W	15-Aug	FN		1871	SFCD	110													
Rob Bay	F2-W	15-Aug	FN		1872	SFCD	109													
Rob Bay	F2-W	15-Aug	FN		1873	SFCD	109													
Rob Bay	F2-W	15-Aug	FN		1874	SFCD	109													
Rob Bay	F2-W	15-Aug	FN		1875	SFCD	109													
Rob Bay	F2-W	15-Aug	FN		1876	SFCD	109													
Rob Bay	F2-W	15-Aug	FN		1877	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1878	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1879	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1880	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1881	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1882	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1883	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1884	SFCD	108													
Rob Bay	F2-W	15-Aug	FN		1885	SFCD	107													
Rob Bay	F2-W	15-Aug	FN		1886	SFCD	107													
Rob Bay	F2-W	15-Aug	FN		1887	SFCD	107													
Rob Bay	F2-W	15-Aug	FN		1888	SFCD	107													
Rob Bay	F2-W	15-Aug	FN		1889	SFCD	107													
Rob Bay	F2-W	15-Aug	FN		1890	SFCD	106													
Rob Bay	F2-W	15-Aug	FN		1891	SFCD	106													
Rob Bay	F2-W	15-Aug	FN		1892	SFCD	105													
Rob Bay	F2-W	15-Aug	FN		1893	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1894	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1895	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1896	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1897	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1898	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1899	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1900	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1901	SFCD	104													
Rob Bay	F2-W	15-Aug	FN		1902	SFCD	103													
Rob Bay	F2-W	15-Aug	FN		1903	SFCD	102													
Rob Bay	F2-W	15-Aug	FN		1904	SFCD	102													
Rob Bay	F2-W	15-Aug	FN		1905	SFCD	101													
Rob Bay	F2-W	15-Aug	FN		1906	SFCD	101													
Rob Bay	F2-W	15-Aug	FN		1907	SFCD	101													
Rob Bay	F2-W	15-Aug	FN		1908	SFCD	100													
Rob Bay	F2-W	15-Aug	FN		1909	SFCD	100													
Rob Bay	F2-W	15-Aug	FN		1910	SFCD	100													
Rob Bay	F2-W	15-Aug	FN		1911	SFCD	100													
Rob Bay	F2-W	15-Aug	FN		1912	SFCD	99													

#### Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-W	19-Aug	FN		2169	SFCD	165													
Rob Bay	F2-W	19-Aug	FN		2170	SFCD	164													
Rob Bay	F2-W	19-Aug	FN		2171	SFCD	164													
Rob Bay	F2-W	19-Aug	FN		2172	SFCD	163													
Rob Bay	F2-W	19-Aug	FN		2173	SFCD	163													
Rob Bay	F2-W	19-Aug	FN		2174	SFCD	163													
Rob Bay	F2-W	19-Aug	FN		2175	SFCD	162													
Rob Bay	F2-W	19-Aug	FN		2176	SFCD	162													
Rob Bay	F2-W	19-Aug	FN		2177	SFCD	162													
Rob Bay	F2-W	19-Aug	FN		2178	SFCD	161													
Rob Bay	F2-W	19-Aug	FN		2179	SFCD	160													
Rob Bay	F2-W	19-Aug	FN		2180	SFCD	160													
Rob Bay	F2-W	19-Aug	FN		2181	SFCD	158													
Rob Bay	F2-W	19-Aug	FN		2182	SFCD	158													
Rob Bay	F2-W	19-Aug	FN		2183	SFCD	158													
Rob Bay	F2-W	19-Aug	FN		2184	SFCD	156													
Rob Bay	F2-W	19-Aug	FN		2185	SFCD	156													
Rob Bay	F2-W	19-Aug	FN		2186	SFCD	155													
Rob Bay	F2-W	19-Aug	FN		2187	SFCD	154													
Rob Bay	F2-W	19-Aug	FN		2188	SFCD	151													
Rob Bay	F2-W	19-Aug	FN		2189	SFCD	148													
Rob Bay	F2-W	19-Aug	FN		2190	SFCD	145													
Rob Bay	F2-W	19-Aug	FN		2191	SFCD	127													
Rob Bay	F2-W	19-Aug	FN		2192	SFCD	126													
Rob Bay	F2-W	19-Aug	FN		2193	SFCD	120													
Rob Bay	F2-W	19-Aug	FN		2194	SFCD	115													
Rob Bay	F2-W	19-Aug	FN		2195	SFCD	115													
Rob Bay	F2-W	19-Aug	FN		2196	SFCD	115													
Rob Bay	F2-W	19-Aug	FN		2197	SFCD	113													
Rob Bay	F2-W	19-Aug	FN		2198	SFCD	113													
Rob Bay	F2-W	19-Aug	FN		2199	SFCD	113													
Rob Bay	F2-W	19-Aug	FN		2200	SFCD	112													
Rob Bay	F2-W	19-Aug	FN		2201	SFCD	112													
Rob Bay	F2-W	19-Aug	FN		2202	SFCD	109													
Rob Bay	F2-W	19-Aug	FN		2203	SFCD	108													
Rob Bay	F2-W	19-Aug	FN		2204	SFCD	107													
Rob Bay	F2-W	19-Aug	FN		2205	SFCD	103													
Rob Bay	F2-W	19-Aug	FN		2206	SFCD	103													
Rob Bay	F2-W	19-Aug	FN		2207	SFCD	102													
Rob Bay	F2-W	19-Aug	FN		2208	SFCD	100													
Rob Bay	F2-W	19-Aug	FN		2209	SFCD	98													
Rob Bay	F2-W	19-Aug	FN		2210	SFCD	97													
Rob Bay	F2-W	19-Aug	FN		2211	SFCD	96													
Rob Bay	F2-W	19-Aug	FN		2212	SFCD	94													
Rob Bay	F2-W	19-Aug	FN		2213	SFCD	93													
Rob Bay	F2-W	19-Aug	FN		2214	SFCD	93													
Rob Bay	F2-W	19-Aug	FN		2215	SFCD	92													
Rob Bay	F2-W	19-Aug	FN		2216	SFCD	84													
Rob Bay	F2-E	19-Aug	FN		2225	SFCD	314	205	0.66											
Rob Bay	F2-E	19-Aug	FN		2226	SFCD	290	165	0.68											
Rob Bay	F2-E	19-Aug	FN		2227	SFCD	284	135	0.59											
Rob Bay	F2-E	19-Aug	FN		2228	SFCD	280	160	0.73											
Rob Bay	F2-E	19-Aug	FN		2229	SFCD	278	155	0.72											
Rob Bay	F2-E	19-Aug	FN		2230	SFCD	275	140	0.67											
Rob Bay	F2-E	19-Aug	FN		2231	SFCD	247	90	0.60											
Rob Bay	F2-E	19-Aug	FN		2232	SFCD	232													
Rob Bay	F2-E	19-Aug	FN		2233	SFCD	232													
Rob Bay	F2-E	19-Aug	FN		2234	SFCD	228													
Rob Bay	F2-E	19-Aug	FN		2235	SFCD	225													
Rob Bay	F2-E	19-Aug	FN		2236	SFCD	208													
Rob Bay	F2-E	19-Aug	FN		2237	SFCD	200													
Rob Bay	F2-E	19-Aug	FN		2238	SFCD	188													
Rob Bay	F2-E	19-Aug	FN		2239	SFCD	187													
Rob Bay	F2-E	19-Aug	FN		2240	SFCD	187													
Rob Bay	F2-E	19-Aug	FN		2241	SFCD	185													
Rob Bay	F2-E	19-Aug	FN		2242	SFCD	184													
Rob Bay	F2-E	19-Aug	FN		2243	SFCD	184													
Rob Bay	F2-E	19-Aug	FN		2244	SFCD	184													
Rob Bay	F2-E	19-Aug	FN		2245	SFCD	182													
Rob Bay	F2-E	19-Aug	FN		2246	SFCD	180													
Rob Bay	F2-E	19-Aug	FN		2247	SFCD	180													
Rob Bay	F2-E	19-Aug	FN		2248	SFCD	178													
Rob Bay	F2-E	19-Aug	FN		2249	SFCD	177													
Rob Bay	F2-E	19-Aug	FN		2250	SFCD	175													
Rob Bay	F2-E	19-Aug	FN		2251	SFCD	174													
Rob Bay	F2-E	19-Aug	FN		2252	SFCD	174													
Rob Bay	F2-E	19-Aug	FN		2253	SFCD	174													
Rob Bay	F2-E	19-Aug	FN		2254	SFCD	174													
Rob Bay	F2-E	19-Aug	FN		2255	SFCD	174													
Rob Bay	F2-E	19-Aug	FN		2256	SFCD	173													
Rob Bay	F2-E	19-Aug	FN		2257	SFCD	173													
Rob Bay	F2-E	19-Aug	FN		2258	SFCD	173													
Rob Bay	F2-E	19-Aug	FN		2259	SFCD	172													
Rob Bay	F2-E	19-Aug	FN		2260	SFCD	172													
Rob Bay	F2-E	19-Aug	FN		2261	SFCD	172													
Rob Bay	F2-E	19-Aug	FN		2262	SFCD	172													
Rob Bay	F2-E	19-Aug	FN		2263	SFCD	171													
Rob Bay	F2-E	19-Aug	FN		2264	SFCD	171													
Rob Bay	F2-E	19-Aug	FN		2265	SFCD	171													
Rob Bay	F2-E	19-Aug	FN		2266	SFCD	170													
Rob Bay	F2-E	19-Aug	FN		2267	SFCD	170													
Rob Bay	F2-E	19-Aug	FN		2268	SFCD	169													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-E	19-Aug	FN		2269	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2270	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2271	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2272	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2273	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2274	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2275	SFCD	168													
Rob Bay	F2-E	19-Aug	FN		2276	SFCD	167													
Rob Bay	F2-E	19-Aug	FN		2277	SFCD	166													
Rob Bay	F2-E	19-Aug	FN		2278	SFCD	166													
Rob Bay	F2-E	19-Aug	FN		2279	SFCD	166													
Rob Bay	F2-E	19-Aug	FN		2280	SFCD	166													
Rob Bay	F2-E	19-Aug	FN		2281	SFCD	165													
Rob Bay	F2-E	19-Aug	FN		2282	SFCD	165													
Rob Bay	F2-E	19-Aug	FN		2283	SFCD	165													
Rob Bay	F2-E	19-Aug	FN		2284	SFCD	164													
Rob Bay	F2-E	19-Aug	FN		2285	SFCD	164													
Rob Bay	F2-E	19-Aug	FN		2286	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2287	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2288	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2289	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2290	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2291	SFCD	163													
Rob Bay	F2-E	19-Aug	FN		2292	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2293	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2294	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2295	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2296	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2297	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2298	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2299	SFCD	162													
Rob Bay	F2-E	19-Aug	FN		2300	SFCD	160													
Rob Bay	F2-E	19-Aug	FN		2301	SFCD	160													
Rob Bay	F2-E	19-Aug	FN		2302	SFCD	158													
Rob Bay	F2-E	19-Aug	FN		2303	SFCD	158													
Rob Bay	F2-E	19-Aug	FN		2304	SFCD	158													
Rob Bay	F2-E	19-Aug	FN		2305	SFCD	158													
Rob Bay	F2-E	19-Aug	FN		2306	SFCD	154													
Rob Bay	F2-E	19-Aug	FN		2307	SFCD	154													
Rob Bay	F2-E	19-Aug	FN		2308	SFCD	153													
Rob Bay	F2-E	19-Aug	FN		2309	SFCD	152													
Rob Bay	F2-E	19-Aug	FN		2310	SFCD	152													
Rob Bay	F2-E	19-Aug	FN		2311	SFCD	152													
Rob Bay	F2-E	19-Aug	FN		2312	SFCD	152													
Rob Bay	F2-E	19-Aug	FN		2313	SFCD	150													
Rob Bay	F2-E	19-Aug	FN		2314	SFCD	150													
Rob Bay	F2-E	19-Aug	FN		2315	SFCD	150													
Rob Bay	F2-E	19-Aug	FN		2316	SFCD	148													
Rob Bay	F2-E	19-Aug	FN		2317	SFCD	142													
Rob Bay	F2-E	19-Aug	FN		2318	SFCD	134													
Rob Bay	F2-E	19-Aug	FN		2319	SFCD	128													
Rob Bay	F2-E	19-Aug	FN		2320	SFCD	125													
Rob Bay	F2-E	19-Aug	FN		2321	SFCD	120													
Rob Bay	F2-E	19-Aug	FN		2322	SFCD	120													
Rob Bay	F2-E	19-Aug	FN		2323	SFCD	120													
Rob Bay	F2-E	19-Aug	FN		2324	SFCD	118													
Rob Bay	F2-E	19-Aug	FN		2325	SFCD	117													
Rob Bay	F2-E	19-Aug	FN		2326	SFCD	117													
Rob Bay	F2-E	19-Aug	FN		2327	SFCD	115													
Rob Bay	F2-E	19-Aug	FN		2328	SFCD	115													
Rob Bay	F2-E	19-Aug	FN		2329	SFCD	114													
Rob Bay	F2-E	19-Aug	FN		2330	SFCD	113													
Rob Bay	F2-E	19-Aug	FN		2331	SFCD	113													
Rob Bay	F2-E	19-Aug	FN		2332	SFCD	113													
Rob Bay	F2-E	19-Aug	FN		2333	SFCD	113													
Rob Bay	F2-E	19-Aug	FN		2334	SFCD	112													
Rob Bay	F2-E	19-Aug	FN		2335	SFCD	112													
Rob Bay	F2-E	19-Aug	FN		2336	SFCD	112													
Rob Bay	F2-E	19-Aug	FN		2337	SFCD	112													
Rob Bay	F2-E	19-Aug	FN		2338	SFCD	110													
Rob Bay	F2-E	19-Aug	FN		2339	SFCD	110													
Rob Bay	F2-E	19-Aug	FN		2340	SFCD	110													
Rob Bay	F2-E	19-Aug	FN		2341	SFCD	110													
Rob Bay	F2-E	19-Aug	FN		2342	SFCD	108													
Rob Bay	F2-E	19-Aug	FN		2343	SFCD	106													
Rob Bay	F2-E	19-Aug	FN		2344	SFCD	104													
Rob Bay	F2-E	19-Aug	FN		2345	SFCD	104													
Rob Bay	F2-E	19-Aug	FN		2346	SFCD	103													
Rob Bay	F2-E	19-Aug	FN		2347	SFCD	103													
Rob Bay	F2-E	19-Aug	FN		2348	SFCD	102													
Rob Bay	F2-E	19-Aug	FN		2349	SFCD	102													
Rob Bay	F2-E	19-Aug	FN		2350	SFCD	102													
Rob Bay	F2-E	19-Aug	FN		2351	SFCD	102													
Rob Bay	F2-E	19-Aug	FN		2352	SFCD	102													
Rob Bay	F2-E	19-Aug	FN		2353	SFCD	100													
Rob Bay	F2-E	19-Aug	FN		2354	SFCD	99													
Rob Bay	F2-E	19-Aug	FN		2355	SFCD	98													
Rob Bay	F2-E	19-Aug	FN		2356	SFCD	98													
Rob Bay	F2-E	19-Aug	FN		2357	SFCD	96													
Rob Bay	F2-E	19-Aug	FN		2358	SFCD	95													
Rob Bay	F2-E	19-Aug	FN		2359	SFCD	95													
Rob Bay	F2-E	19-Aug	FN		2360	SFCD	94													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-E	19-Aug	FN		2361	SFCD	92													
Rob Bay	F2-E	19-Aug	FN		2362	SFCD	92													
Rob Bay	F2-E	19-Aug	FN		2363	SFCD	92													
Rob Bay	F2-E	19-Aug	FN		2364	SFCD	104													
Rob Bay	F2-E	22-Aug	FN		2509	SFCD	195													
Rob Bay	F2-E	22-Aug	FN		2510	SFCD	177													
Rob Bay	F2-E	22-Aug	FN		2511	SFCD	174													
Rob Bay	F2-E	22-Aug	FN		2512	SFCD	174													
Rob Bay	F2-E	22-Aug	FN		2513	SFCD	170													
Rob Bay	F2-E	22-Aug	FN		2514	SFCD	168													
Rob Bay	F2-E	22-Aug	FN		2515	SFCD	168													
Rob Bay	F2-E	22-Aug	FN		2516	SFCD	168													
Rob Bay	F2-E	22-Aug	FN		2517	SFCD	168													
Rob Bay	F2-E	22-Aug	FN		2518	SFCD	168													
Rob Bay	F2-E	22-Aug	FN		2519	SFCD	167													
Rob Bay	F2-E	22-Aug	FN		2520	SFCD	165													
Rob Bay	F2-E	22-Aug	FN		2521	SFCD	165													
Rob Bay	F2-E	22-Aug	FN		2522	SFCD	165													
Rob Bay	F2-E	22-Aug	FN		2523	SFCD	162													
Rob Bay	F2-E	22-Aug	FN		2524	SFCD	160													
Rob Bay	F2-E	22-Aug	FN		2525	SFCD	160													
Rob Bay	F2-E	22-Aug	FN		2526	SFCD	158													
Rob Bay	F2-E	22-Aug	FN		2527	SFCD	158													
Rob Bay	F2-E	22-Aug	FN		2528	SFCD	156													
Rob Bay	F2-E	22-Aug	FN		2529	SFCD	156													
Rob Bay	F2-E	22-Aug	FN		2530	SFCD	156													
Rob Bay	F2-E	22-Aug	FN		2531	SFCD	152													
Rob Bay	F2-E	22-Aug	FN		2532	SFCD	146													
Rob Bay	F2-E	22-Aug	FN		2533	SFCD	126													
Rob Bay	F2-E	22-Aug	FN		2534	SFCD	126													
Rob Bay	F2-E	22-Aug	FN		2535	SFCD	123													
Rob Bay	F2-E	22-Aug	FN		2536	SFCD	123													
Rob Bay	F2-E	22-Aug	FN		2537	SFCD	122													
Rob Bay	F2-E	22-Aug	FN		2538	SFCD	122													
Rob Bay	F2-E	22-Aug	FN		2539	SFCD	122													
Rob Bay	F2-E	22-Aug	FN		2540	SFCD	121													
Rob Bay	F2-E	22-Aug	FN		2541	SFCD	120													
Rob Bay	F2-E	22-Aug	FN		2542	SFCD	118													
Rob Bay	F2-E	22-Aug	FN		2543	SFCD	118													
Rob Bay	F2-E	22-Aug	FN		2544	SFCD	118													
Rob Bay	F2-E	22-Aug	FN		2545	SFCD	118													
Rob Bay	F2-E	22-Aug	FN		2546	SFCD	117													
Rob Bay	F2-E	22-Aug	FN		2547	SFCD	117													
Rob Bay	F2-E	22-Aug	FN		2548	SFCD	117													
Rob Bay	F2-E	22-Aug	FN		2549	SFCD	117													
Rob Bay	F2-E	22-Aug	FN		2550	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2551	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2552	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2553	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2554	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2555	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2556	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2557	SFCD	116													
Rob Bay	F2-E	22-Aug	FN		2558	SFCD	115													
Rob Bay	F2-E	22-Aug	FN		2559	SFCD	115													
Rob Bay	F2-E	22-Aug	FN		2560	SFCD	115													
Rob Bay	F2-E	22-Aug	FN		2561	SFCD	115													
Rob Bay	F2-E	22-Aug	FN		2562	SFCD	115													
Rob Bay	F2-E	22-Aug	FN		2563	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2564	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2565	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2566	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2567	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2568	SFCD	114													
Rob Bay	F2-E	22-Aug	FN		2569	SFCD	113													
Rob Bay	F2-E	22-Aug	FN		2570	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2571	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2572	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2573	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2574	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2575	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2576	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2577	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2578	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2579	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2580	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2581	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2582	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2583	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2584	SFCD	112													
Rob Bay	F2-E	22-Aug	FN		2585	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2586	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2587	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2588	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2589	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2590	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2591	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2592	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2593	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2594	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2595	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2596	SFCD	110													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-E	22-Aug	FN		2597	SFCD	110													
Rob Bay	F2-E	22-Aug	FN		2598	SFCD	109													
Rob Bay	F2-E	22-Aug	FN		2599	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2600	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2601	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2602	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2603	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2604	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2605	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2606	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2607	SFCD	108													
Rob Bay	F2-E	22-Aug	FN		2608	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2609	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2610	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2611	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2612	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2613	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2614	SFCD	107													
Rob Bay	F2-E	22-Aug	FN		2615	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2616	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2617	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2618	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2619	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2620	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2621	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2622	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2623	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2624	SFCD	106													
Rob Bay	F2-E	22-Aug	FN		2625	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2626	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2627	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2628	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2629	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2630	SFCD	105													
Rob Bay	F2-E	22-Aug	FN		2631	SFCD	104													
Rob Bay	F2-E	22-Aug	FN		2632	SFCD	104													
Rob Bay	F2-E	22-Aug	FN		2633	SFCD	104													
Rob Bay	F2-E	22-Aug	FN		2634	SFCD	103													
Rob Bay	F2-E	22-Aug	FN		2635	SFCD	103													
Rob Bay	F2-E	22-Aug	FN		2636	SFCD	103													
Rob Bay	F2-E	22-Aug	FN		2637	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2638	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2639	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2640	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2641	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2642	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2643	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2644	SFCD	102													
Rob Bay	F2-E	22-Aug	FN		2645	SFCD	101													
Rob Bay	F2-E	22-Aug	FN		2646	SFCD	101													
Rob Bay	F2-E	22-Aug	FN		2647	SFCD	101													
Rob Bay	F2-E	22-Aug	FN		2648	SFCD	101													
Rob Bay	F2-E	22-Aug	FN		2649	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2650	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2651	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2652	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2653	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2654	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2655	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2656	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2657	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2658	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2659	SFCD	100													
Rob Bay	F2-E	22-Aug	FN		2660	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2661	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2662	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2663	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2664	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2665	SFCD	98													
Rob Bay	F2-E	22-Aug	FN		2666	SFCD	95													
Rob Bay	F2-E	22-Aug	FN		2667	SFCD	94													
Rob Bay	F2-E	22-Aug	FN		2668	SFCD	94													
Rob Bay	F2-E	22-Aug	FN		2669	SFCD	93													
Rob Bay	F2-E	22-Aug	FN		2670	SFCD	93													
Rob Bay	F2-E	22-Aug	FN		2671	SFCD	90													
Rob Bay	F2-E	22-Aug	FN		2672	SFCD	90													
Rob Bay	F2-E	22-Aug	FN		2673	SFCD	87													
Rob Bay	F2-W	22-Aug	FN		2679	SFCD	195													
Rob Bay	F2-W	22-Aug	FN		2680	SFCD	184													
Rob Bay	F2-W	22-Aug	FN		2681	SFCD	175													
Rob Bay	F2-W	22-Aug	FN		2682	SFCD	170													
Rob Bay	F2-W	22-Aug	FN		2683	SFCD	170													
Rob Bay	F2-W	22-Aug	FN		2684	SFCD	170													
Rob Bay	F2-W	22-Aug	FN		2685	SFCD	170													
Rob Bay	F2-W	22-Aug	FN		2686	SFCD	170													
Rob Bay	F2-W	22-Aug	FN		2687	SFCD	165													
Rob Bay	F2-W	22-Aug	FN		2688	SFCD	163													
Rob Bay	F2-W	22-Aug	FN		2689	SFCD	162													
Rob Bay	F2-W	22-Aug	FN		2690	SFCD	162													
Rob Bay	F2-W	22-Aug	FN		2691	SFCD	160													
Rob Bay	F2-W	22-Aug	FN		2692	SFCD	160													
Rob Bay	F2-W	22-Aug	FN		2693	SFCD	160													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F2-W	22-Aug	FN		2694	SFCD	156													
Rob Bay	F2-W	22-Aug	FN		2695	SFCD	152													
Rob Bay	F2-W	22-Aug	FN		2696	SFCD	152													
Rob Bay	F2-W	22-Aug	FN		2697	SFCD	140													
Rob Bay	F2-W	22-Aug	FN		2698	SFCD	135													
Rob Bay	F2-W	22-Aug	FN		2699	SFCD	132													
Rob Bay	F2-W	22-Aug	FN		2700	SFCD	125													
Rob Bay	F2-W	22-Aug	FN		2701	SFCD	125													
Rob Bay	F2-W	22-Aug	FN		2702	SFCD	122													
Rob Bay	F2-W	22-Aug	FN		2703	SFCD	122													
Rob Bay	F2-W	22-Aug	FN		2704	SFCD	122													
Rob Bay	F2-W	22-Aug	FN		2705	SFCD	122													
Rob Bay	F2-W	22-Aug	FN		2706	SFCD	120													
Rob Bay	F2-W	22-Aug	FN		2707	SFCD	117													
Rob Bay	F2-W	22-Aug	FN		2708	SFCD	117													
Rob Bay	F2-W	22-Aug	FN		2709	SFCD	117													
Rob Bay	F2-W	22-Aug	FN		2710	SFCD	117													
Rob Bay	F2-W	22-Aug	FN		2711	SFCD	117													
Rob Bay	F2-W	22-Aug	FN		2712	SFCD	116													
Rob Bay	F2-W	22-Aug	FN		2713	SFCD	116													
Rob Bay	F2-W	22-Aug	FN		2714	SFCD	116													
Rob Bay	F2-W	22-Aug	FN		2715	SFCD	115													
Rob Bay	F2-W	22-Aug	FN		2716	SFCD	115													
Rob Bay	F2-W	22-Aug	FN		2717	SFCD	113													
Rob Bay	F2-W	22-Aug	FN		2718	SFCD	113													
Rob Bay	F2-W	22-Aug	FN		2719	SFCD	113													
Rob Bay	F2-W	22-Aug	FN		2720	SFCD	112													
Rob Bay	F2-W	22-Aug	FN		2721	SFCD	110													
Rob Bay	F2-W	22-Aug	FN		2722	SFCD	109													
Rob Bay	F2-W	22-Aug	FN		2723	SFCD	109													
Rob Bay	F2-W	22-Aug	FN		2724	SFCD	109													
Rob Bay	F2-W	22-Aug	FN		2725	SFCD	108													
Rob Bay	F2-W	22-Aug	FN		2726	SFCD	107													
Rob Bay	F2-W	22-Aug	FN		2727	SFCD	107													
Rob Bay	F2-W	22-Aug	FN		2728	SFCD	106													
Rob Bay	F2-W	22-Aug	FN		2729	SFCD	105													
Rob Bay	F2-W	22-Aug	FN		2730	SFCD	105													
Rob Bay	F2-W	22-Aug	FN		2731	SFCD	104													
Rob Bay	F2-W	22-Aug	FN		2732	SFCD	104													
Rob Bay	F2-W	22-Aug	FN		2733	SFCD	102													
Rob Bay	F2-W	22-Aug	FN		2734	SFCD	95													
Rob Bay	F2-W	22-Aug	FN		2735	SFCD	83													
Rob Bay	F1-W	26-Aug	FN		2837	SFCD	456													
Rob Bay	F1-W	26-Aug	FN		2838	SFCD	365													
Rob Bay	F1-W	26-Aug	FN		2839	SFCD	365													
Rob Bay	F1-W	26-Aug	FN		2840	SFCD	355													
Rob Bay	F1-W	26-Aug	FN		2841	SFCD	350													
Rob Bay	F1-W	26-Aug	FN		2842	SFCD	344													
Rob Bay	F1-W	26-Aug	FN		2843	SFCD	336													
Rob Bay	F1-W	26-Aug	FN		2844	SFCD	330													
Rob Bay	F1-W	26-Aug	FN		2845	SFCD	311													
Rob Bay	F1-W	26-Aug	FN		2846	SFCD	310													
Rob Bay	F1-W	26-Aug	FN		2847	SFCD	310													
Rob Bay	F1-W	26-Aug	FN		2848	SFCD	296													
Rob Bay	F1-W	26-Aug	FN		2849	SFCD	295													
Rob Bay	F1-W	26-Aug	FN		2850	SFCD	295													
Rob Bay	F1-W	26-Aug	FN		2851	SFCD	295													
Rob Bay	F1-W	26-Aug	FN		2852	SFCD	295													
Rob Bay	F1-W	26-Aug	FN		2853	SFCD	294													
Rob Bay	F1-W	26-Aug	FN		2854	SFCD	290													
Rob Bay	F1-W	26-Aug	FN		2855	SFCD	290													
Rob Bay	F1-W	26-Aug	FN		2856	SFCD	290													
Rob Bay	F1-W	26-Aug	FN		2857	SFCD	287													
Rob Bay	F1-W	26-Aug	FN		2858	SFCD	285													
Rob Bay	F1-W	26-Aug	FN		2859	SFCD	285													
Rob Bay	F1-W	26-Aug	FN		2860	SFCD	285													
Rob Bay	F1-W	26-Aug	FN		2861	SFCD	285													
Rob Bay	F1-W	26-Aug	FN		2862	SFCD	284													
Rob Bay	F1-W	26-Aug	FN		2863	SFCD	283													
Rob Bay	F1-W	26-Aug	FN		2864	SFCD	281													
Rob Bay	F1-W	26-Aug	FN		2865	SFCD	280													
Rob Bay	F1-W	26-Aug	FN		2866	SFCD	275													
Rob Bay	F1-W	26-Aug	FN		2867	SFCD	275													
Rob Bay	F1-W	26-Aug	FN		2868	SFCD	273													
Rob Bay	F1-W	26-Aug	FN		2869	SFCD	271													
Rob Bay	F1-W	26-Aug	FN		2870	SFCD	270													
Rob Bay	F1-W	26-Aug	FN		2871	SFCD	265													
Rob Bay	F1-W	26-Aug	FN		2872	SFCD	265													
Rob Bay	F1-W	26-Aug	FN		2873	SFCD	265													
Rob Bay	F1-W	26-Aug	FN		2874	SFCD	264													
Rob Bay	F1-W	26-Aug	FN		2875	SFCD	258													
Rob Bay	F1-W	26-Aug	FN		2876	SFCD	255													
Rob Bay	F1-W	26-Aug	FN		2877	SFCD	252													
Rob Bay	F1-W	26-Aug	FN		2878	SFCD	245													
Rob Bay	F1-W	26-Aug	FN		2879	SFCD	241													
Rob Bay	F1-W	26-Aug	FN		2880	SFCD	236													
Rob Bay	F1-W	26-Aug	FN		2881	SFCD	236													
Rob Bay	F1-W	26-Aug	FN		2882	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2883	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2884	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2885	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2886	SFCD	235													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-W	26-Aug	FN		2887	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2888	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2889	SFCD	235													
Rob Bay	F1-W	26-Aug	FN		2890	SFCD	233													
Rob Bay	F1-W	26-Aug	FN		2891	SFCD	231													
Rob Bay	F1-W	26-Aug	FN		2892	SFCD	231													
Rob Bay	F1-W	26-Aug	FN		2893	SFCD	230													
Rob Bay	F1-W	26-Aug	FN		2894	SFCD	230													
Rob Bay	F1-W	26-Aug	FN		2895	SFCD	230													
Rob Bay	F1-W	26-Aug	FN		2896	SFCD	210													
Rob Bay	F1-W	26-Aug	FN		2897	SFCD	207													
Rob Bay	F1-W	26-Aug	FN		2898	SFCD	206													
Rob Bay	F1-W	26-Aug	FN		2899	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2900	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2901	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2902	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2903	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2904	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2905	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2906	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2907	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2908	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2909	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2910	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2911	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2912	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2913	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2914	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2915	SFCD	205													
Rob Bay	F1-W	26-Aug	FN		2916	SFCD	204													
Rob Bay	F1-W	26-Aug	FN		2917	SFCD	203													
Rob Bay	F1-W	26-Aug	FN		2918	SFCD	203													
Rob Bay	F1-W	26-Aug	FN		2919	SFCD	203													
Rob Bay	F1-W	26-Aug	FN		2920	SFCD	202													
Rob Bay	F1-W	26-Aug	FN		2921	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2922	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2923	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2924	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2925	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2926	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2927	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2928	SFCD	200													
Rob Bay	F1-W	26-Aug	FN		2929	SFCD	197													
Rob Bay	F1-W	26-Aug	FN		2930	SFCD	196													
Rob Bay	F1-W	26-Aug	FN		2931	SFCD	196													
Rob Bay	F1-W	26-Aug	FN		2932	SFCD	196													
Rob Bay	F1-W	26-Aug	FN		2933	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2934	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2935	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2936	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2937	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2938	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2939	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2940	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2941	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2942	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2943	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2944	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2945	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2946	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2947	SFCD	195													
Rob Bay	F1-W	26-Aug	FN		2948	SFCD	194													
Rob Bay	F1-W	26-Aug	FN		2949	SFCD	194													
Rob Bay	F1-W	26-Aug	FN		2950	SFCD	191													
Rob Bay	F1-W	26-Aug	FN		2951	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2952	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2953	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2954	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2955	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2956	SFCD	190													
Rob Bay	F1-W	26-Aug	FN		2957	SFCD	186													
Rob Bay	F1-W	26-Aug	FN		2958	SFCD	185													
Rob Bay	F1-W	26-Aug	FN		2959	SFCD	185													
Rob Bay	F1-W	26-Aug	FN		2960	SFCD	183													
Rob Bay	F1-W	26-Aug	FN		2961	SFCD	182													
Rob Bay	F1-W	26-Aug	FN		2962	SFCD	181													
Rob Bay	F1-W	26-Aug	FN		2963	SFCD	181													
Rob Bay	F1-W	26-Aug	FN		2964	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2965	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2966	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2967	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2968	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2969	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2970	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2971	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2972	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2973	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2974	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2975	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2976	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2977	SFCD	180													
Rob Bay	F1-W	26-Aug	FN		2978	SFCD	180													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-W	26-Aug	FN		2979	SFCD	178													
Rob Bay	F1-W	26-Aug	FN		2980	SFCD	177													
Rob Bay	F1-W	26-Aug	FN		2981	SFCD	177													
Rob Bay	F1-W	26-Aug	FN		2982	SFCD	176													
Rob Bay	F1-W	26-Aug	FN		2983	SFCD	176													
Rob Bay	F1-W	26-Aug	FN		2984	SFCD	176													
Rob Bay	F1-W	26-Aug	FN		2985	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2986	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2987	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2988	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2989	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2990	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2991	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2992	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2993	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2994	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2995	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2996	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2997	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2998	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		2999	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3000	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3001	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3002	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3003	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3004	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3005	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3006	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3007	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3008	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3009	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3010	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3011	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3012	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3013	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3014	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3015	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3016	SFCD	175													
Rob Bay	F1-W	26-Aug	FN		3017	SFCD	174													
Rob Bay	F1-W	26-Aug	FN		3018	SFCD	174													
Rob Bay	F1-W	26-Aug	FN		3019	SFCD	174													
Rob Bay	F1-W	26-Aug	FN		3020	SFCD	174													
Rob Bay	F1-W	26-Aug	FN		3021	SFCD	174													
Rob Bay	F1-W	26-Aug	FN		3022	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3023	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3024	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3025	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3026	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3027	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3028	SFCD	173													
Rob Bay	F1-W	26-Aug	FN		3029	SFCD	172													
Rob Bay	F1-W	26-Aug	FN		3030	SFCD	172													
Rob Bay	F1-W	26-Aug	FN		3031	SFCD	172													
Rob Bay	F1-W	26-Aug	FN		3032	SFCD	172													
Rob Bay	F1-W	26-Aug	FN		3033	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3034	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3035	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3036	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3037	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3038	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3039	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3040	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3041	SFCD	171													
Rob Bay	F1-W	26-Aug	FN		3042	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3043	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3044	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3045	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3046	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3047	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3048	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3049	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3050	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3051	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3052	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3053	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3054	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3055	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3056	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3057	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3058	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3059	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3060	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3061	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3062	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3063	SFCD	170													
Rob Bay	F1-W	26-Aug	FN		3064	SFCD	169													
Rob Bay	F1-W	26-Aug	FN		3065	SFCD	168													
Rob Bay	F1-W	26-Aug	FN		3066	SFCD	168													
Rob Bay	F1-W	26-Aug	FN		3067	SFCD	168													
Rob Bay	F1-W	26-Aug	FN		3068	SFCD	168													
Rob Bay	F1-W	26-Aug	FN		3069	SFCD	167													
Rob Bay	F1-W	26-Aug	FN		3070	SFCD	166													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-W	26-Aug	FN		3071	SFCD	166													
Rob Bay	F1-W	26-Aug	FN		3072	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3073	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3074	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3075	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3076	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3077	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3078	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3079	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3080	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3081	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3082	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3083	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3084	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3085	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3086	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3087	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3088	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3089	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3090	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3091	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3092	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3093	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3094	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3095	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3096	SFCD	165													
Rob Bay	F1-W	26-Aug	FN		3097	SFCD	164													
Rob Bay	F1-W	26-Aug	FN		3098	SFCD	163													
Rob Bay	F1-W	26-Aug	FN		3099	SFCD	163													
Rob Bay	F1-W	26-Aug	FN		3100	SFCD	163													
Rob Bay	F1-W	26-Aug	FN		3101	SFCD	161													
Rob Bay	F1-W	26-Aug	FN		3102	SFCD	161													
Rob Bay	F1-W	26-Aug	FN		3103	SFCD	161													
Rob Bay	F1-W	26-Aug	FN		3104	SFCD	161													
Rob Bay	F1-W	26-Aug	FN		3105	SFCD	161													
Rob Bay	F1-W	26-Aug	FN		3106	SFCD	160													
Rob Bay	F1-W	26-Aug	FN		3107	SFCD	160													
Rob Bay	F1-W	26-Aug	FN		3108	SFCD	160													
Rob Bay	F1-W	26-Aug	FN		3109	SFCD	160													
Rob Bay	F1-W	26-Aug	FN		3110	SFCD	160													
Rob Bay	F1-W	26-Aug	FN		3111	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3112	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3113	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3114	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3115	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3116	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3117	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3118	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3119	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3120	SFCD	155													
Rob Bay	F1-W	26-Aug	FN		3121	SFCD	154													
Rob Bay	F1-W	26-Aug	FN		3122	SFCD	154													
Rob Bay	F1-W	26-Aug	FN		3123	SFCD	151													
Rob Bay	F1-W	26-Aug	FN		3124	SFCD	151													
Rob Bay	F1-W	26-Aug	FN		3125	SFCD	150													
Rob Bay	F1-W	26-Aug	FN		3126	SFCD	150													
Rob Bay	F1-W	26-Aug	FN		3127	SFCD	150													
Rob Bay	F1-W	26-Aug	FN		3128	SFCD	150													
Rob Bay	F1-W	26-Aug	FN		3129	SFCD	145													
Rob Bay	F1-W	26-Aug	FN		3130	SFCD	145													
Rob Bay	F1-W	26-Aug	FN		3131	SFCD	145													
Rob Bay	F1-W	26-Aug	FN		3132	SFCD	145													
Rob Bay	F1-W	26-Aug	FN		3133	SFCD	141													
Rob Bay	F1-W	26-Aug	FN		3134	SFCD	135													
Rob Bay	F1-W	26-Aug	FN		3135	SFCD	135													
Rob Bay	F1-W	26-Aug	FN		3136	SFCD	135													
Rob Bay	F1-W	26-Aug	FN		3137	SFCD	130													
Rob Bay	F1-W	26-Aug	FN		3138	SFCD	125													
Rob Bay	F1-W	26-Aug	FN		3139	SFCD	118													
Rob Bay	F1-W	26-Aug	FN		3140	SFCD	112													
Rob Bay	F1-W	26-Aug	FN		3141	SFCD	110													
Rob Bay	F1-W	26-Aug	FN		3142	SFCD	110													
Rob Bay	F1-W	26-Aug	FN		3143	SFCD	106													
Rob Bay	F1-W	26-Aug	FN		3144	SFCD	105													
Rob Bay	F1-W	26-Aug	FN		3145	SFCD	105													
Rob Bay	F1-W	26-Aug	FN		3146	SFCD	105													
Rob Bay	F1-W	26-Aug	FN		3147	SFCD	105													
Rob Bay	F1-W	26-Aug	FN		3148	SFCD	103													
Rob Bay	F1-W	26-Aug	FN		3149	SFCD	102													
Rob Bay	F1-W	26-Aug	FN		3150	SFCD	85													
Rob Bay	F1-E	26-Aug	FN		3154	SFCD	352													
Rob Bay	F1-E	26-Aug	FN		3155	SFCD	315													
Rob Bay	F1-E	26-Aug	FN		3156	SFCD	290													
Rob Bay	F1-E	26-Aug	FN		3157	SFCD	286													
Rob Bay	F1-E	26-Aug	FN		3158	SFCD	280													
Rob Bay	F1-E	26-Aug	FN		3159	SFCD	268													
Rob Bay	F1-E	26-Aug	FN		3160	SFCD	250													
Rob Bay	F1-E	26-Aug	FN		3161	SFCD	238													
Rob Bay	F1-E	26-Aug	FN		3162	SFCD	235													
Rob Bay	F1-E	26-Aug	FN		3163	SFCD	235													
Rob Bay	F1-E	26-Aug	FN		3164	SFCD	230													
Rob Bay	F1-E	26-Aug	FN		3165	SFCD	205													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-E	26-Aug	FN		3166	SFCD	200													
Rob Bay	F1-E	26-Aug	FN		3167	SFCD	200													
Rob Bay	F1-E	26-Aug	FN		3168	SFCD	198													
Rob Bay	F1-E	26-Aug	FN		3169	SFCD	197													
Rob Bay	F1-E	26-Aug	FN		3170	SFCD	195													
Rob Bay	F1-E	26-Aug	FN		3171	SFCD	195													
Rob Bay	F1-E	26-Aug	FN		3172	SFCD	185													
Rob Bay	F1-E	26-Aug	FN		3173	SFCD	181													
Rob Bay	F1-E	26-Aug	FN		3174	SFCD	180													
Rob Bay	F1-E	26-Aug	FN		3175	SFCD	180													
Rob Bay	F1-E	26-Aug	FN		3176	SFCD	178													
Rob Bay	F1-E	26-Aug	FN		3177	SFCD	178													
Rob Bay	F1-E	26-Aug	FN		3178	SFCD	176													
Rob Bay	F1-E	26-Aug	FN		3179	SFCD	176													
Rob Bay	F1-E	26-Aug	FN		3180	SFCD	175													
Rob Bay	F1-E	26-Aug	FN		3181	SFCD	173													
Rob Bay	F1-E	26-Aug	FN		3182	SFCD	172													
Rob Bay	F1-E	26-Aug	FN		3183	SFCD	171													
Rob Bay	F1-E	26-Aug	FN		3184	SFCD	170													
Rob Bay	F1-E	26-Aug	FN		3185	SFCD	170													
Rob Bay	F1-E	26-Aug	FN		3186	SFCD	168													
Rob Bay	F1-E	26-Aug	FN		3187	SFCD	165													
Rob Bay	F1-E	26-Aug	FN		3188	SFCD	165													
Rob Bay	F1-E	26-Aug	FN		3189	SFCD	163													
Rob Bay	F1-E	26-Aug	FN		3190	SFCD	163													
Rob Bay	F1-E	26-Aug	FN		3191	SFCD	162													
Rob Bay	F1-E	26-Aug	FN		3192	SFCD	160													
Rob Bay	F1-E	26-Aug	FN		3193	SFCD	160													
Rob Bay	F1-E	26-Aug	FN		3194	SFCD	160													
Rob Bay	F1-E	26-Aug	FN		3195	SFCD	160													
Rob Bay	F1-E	26-Aug	FN		3196	SFCD	158													
Rob Bay	F1-E	26-Aug	FN		3197	SFCD	157													
Rob Bay	F1-E	26-Aug	FN		3198	SFCD	153													
Rob Bay	F1-E	26-Aug	FN		3199	SFCD	150													
Rob Bay	F1-E	26-Aug	FN		3200	SFCD	145													
Rob Bay	F1-E	26-Aug	FN		3201	SFCD	126													
Rob Bay	F1-E	26-Aug	FN		3202	SFCD	120													
Rob Bay	F1-E	26-Aug	FN		3203	SFCD	110													
Rob Bay	F1-E	26-Aug	FN		3204	SFCD	110													
Rob Bay	F1-E	26-Aug	FN		3205	SFCD	108													
Rob Bay	F1-E	26-Aug	FN		3206	SFCD	108													
Rob Bay	F1-E	26-Aug	FN		3207	SFCD	108													
Rob Bay	F1-E	26-Aug	FN		3208	SFCD	106													
Rob Bay	F1-E	26-Aug	FN		3209	SFCD	105													
Rob Bay	F1-E	26-Aug	FN		3210	SFCD	105													
Rob Bay	F1-E	27-Aug	FN		3230	SFCD	295													
Rob Bay	F1-E	27-Aug	FN		3231	SFCD	290													
Rob Bay	F1-E	27-Aug	FN		3232	SFCD	285													
Rob Bay	F1-E	27-Aug	FN		3233	SFCD	283													
Rob Bay	F1-E	27-Aug	FN		3234	SFCD	280													
Rob Bay	F1-E	27-Aug	FN		3235	SFCD	276													
Rob Bay	F1-E	27-Aug	FN		3236	SFCD	270													
Rob Bay	F1-E	27-Aug	FN		3237	SFCD	263													
Rob Bay	F1-E	27-Aug	FN		3238	SFCD	240													
Rob Bay	F1-E	27-Aug	FN		3239	SFCD	237													
Rob Bay	F1-E	27-Aug	FN		3240	SFCD	235													
Rob Bay	F1-E	27-Aug	FN		3241	SFCD	231													
Rob Bay	F1-E	27-Aug	FN		3242	SFCD	230													
Rob Bay	F1-E	27-Aug	FN		3243	SFCD	228													
Rob Bay	F1-E	27-Aug	FN		3244	SFCD	228													
Rob Bay	F1-E	27-Aug	FN		3245	SFCD	227													
Rob Bay	F1-E	27-Aug	FN		3246	SFCD	225													
Rob Bay	F1-E	27-Aug	FN		3247	SFCD	223													
Rob Bay	F1-E	27-Aug	FN		3248	SFCD	222													
Rob Bay	F1-E	27-Aug	FN		3249	SFCD	221													
Rob Bay	F1-E	27-Aug	FN		3250	SFCD	211													
Rob Bay	F1-E	27-Aug	FN		3251	SFCD	205													
Rob Bay	F1-E	27-Aug	FN		3252	SFCD	203													
Rob Bay	F1-E	27-Aug	FN		3253	SFCD	203													
Rob Bay	F1-E	27-Aug	FN		3254	SFCD	200													
Rob Bay	F1-E	27-Aug	FN		3255	SFCD	193													
Rob Bay	F1-E	27-Aug	FN		3256	SFCD	193													
Rob Bay	F1-E	27-Aug	FN		3257	SFCD	192													
Rob Bay	F1-E	27-Aug	FN		3258	SFCD	190													
Rob Bay	F1-E	27-Aug	FN		3259	SFCD	190													
Rob Bay	F1-E	27-Aug	FN		3260	SFCD	187													
Rob Bay	F1-E	27-Aug	FN		3261	SFCD	187													
Rob Bay	F1-E	27-Aug	FN		3262	SFCD	186													
Rob Bay	F1-E	27-Aug	FN		3263	SFCD	185													
Rob Bay	F1-E	27-Aug	FN		3264	SFCD	185													
Rob Bay	F1-E	27-Aug	FN		3265	SFCD	185													
Rob Bay	F1-E	27-Aug	FN		3266	SFCD	184													
Rob Bay	F1-E	27-Aug	FN		3267	SFCD	182													
Rob Bay	F1-E	27-Aug	FN		3268	SFCD	181													
Rob Bay	F1-E	27-Aug	FN		3269	SFCD	181													
Rob Bay	F1-E	27-Aug	FN		3270	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3271	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3272	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3273	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3274	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3275	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3276	SFCD	180													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-E	27-Aug	FN		3277	SFCD	180													
Rob Bay	F1-E	27-Aug	FN		3278	SFCD	177													
Rob Bay	F1-E	27-Aug	FN		3279	SFCD	175													
Rob Bay	F1-E	27-Aug	FN		3280	SFCD	175													
Rob Bay	F1-E	27-Aug	FN		3281	SFCD	175													
Rob Bay	F1-E	27-Aug	FN		3282	SFCD	175													
Rob Bay	F1-E	27-Aug	FN		3283	SFCD	174													
Rob Bay	F1-E	27-Aug	FN		3284	SFCD	173													
Rob Bay	F1-E	27-Aug	FN		3285	SFCD	173													
Rob Bay	F1-E	27-Aug	FN		3286	SFCD	173													
Rob Bay	F1-E	27-Aug	FN		3287	SFCD	172													
Rob Bay	F1-E	27-Aug	FN		3288	SFCD	171													
Rob Bay	F1-E	27-Aug	FN		3289	SFCD	171													
Rob Bay	F1-E	27-Aug	FN		3290	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3291	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3292	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3293	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3294	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3295	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3296	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3297	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3298	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3299	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3300	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3301	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3302	SFCD	170													
Rob Bay	F1-E	27-Aug	FN		3303	SFCD	169													
Rob Bay	F1-E	27-Aug	FN		3304	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3305	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3306	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3307	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3308	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3309	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3310	SFCD	168													
Rob Bay	F1-E	27-Aug	FN		3311	SFCD	167													
Rob Bay	F1-E	27-Aug	FN		3312	SFCD	167													
Rob Bay	F1-E	27-Aug	FN		3313	SFCD	167													
Rob Bay	F1-E	27-Aug	FN		3314	SFCD	166													
Rob Bay	F1-E	27-Aug	FN		3315	SFCD	166													
Rob Bay	F1-E	27-Aug	FN		3316	SFCD	166													
Rob Bay	F1-E	27-Aug	FN		3317	SFCD	166													
Rob Bay	F1-E	27-Aug	FN		3318	SFCD	165													
Rob Bay	F1-E	27-Aug	FN		3319	SFCD	165													
Rob Bay	F1-E	27-Aug	FN		3320	SFCD	165													
Rob Bay	F1-E	27-Aug	FN		3321	SFCD	165													
Rob Bay	F1-E	27-Aug	FN		3322	SFCD	164													
Rob Bay	F1-E	27-Aug	FN		3323	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3324	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3325	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3326	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3327	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3328	SFCD	163													
Rob Bay	F1-E	27-Aug	FN		3329	SFCD	162													
Rob Bay	F1-E	27-Aug	FN		3330	SFCD	162													
Rob Bay	F1-E	27-Aug	FN		3331	SFCD	162													
Rob Bay	F1-E	27-Aug	FN		3332	SFCD	162													
Rob Bay	F1-E	27-Aug	FN		3333	SFCD	161													
Rob Bay	F1-E	27-Aug	FN		3334	SFCD	161													
Rob Bay	F1-E	27-Aug	FN		3335	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3336	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3337	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3338	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3339	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3340	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3341	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3342	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3343	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3344	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3345	SFCD	160													
Rob Bay	F1-E	27-Aug	FN		3346	SFCD	158													
Rob Bay	F1-E	27-Aug	FN		3347	SFCD	158													
Rob Bay	F1-E	27-Aug	FN		3348	SFCD	158													
Rob Bay	F1-E	27-Aug	FN		3349	SFCD	158													
Rob Bay	F1-E	27-Aug	FN		3350	SFCD	157													
Rob Bay	F1-E	27-Aug	FN		3351	SFCD	157													
Rob Bay	F1-E	27-Aug	FN		3352	SFCD	156													
Rob Bay	F1-E	27-Aug	FN		3353	SFCD	156													
Rob Bay	F1-E	27-Aug	FN		3354	SFCD	156													
Rob Bay	F1-E	27-Aug	FN		3355	SFCD	156													
Rob Bay	F1-E	27-Aug	FN		3356	SFCD	156													
Rob Bay	F1-E	27-Aug	FN		3357	SFCD	155													
Rob Bay	F1-E	27-Aug	FN		3358	SFCD	155													
Rob Bay	F1-E	27-Aug	FN		3359	SFCD	152													
Rob Bay	F1-E	27-Aug	FN		3360	SFCD	151													
Rob Bay	F1-E	27-Aug	FN		3361	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3362	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3363	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3364	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3365	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3366	SFCD	150													
Rob Bay	F1-E	27-Aug	FN		3367	SFCD	148													
Rob Bay	F1-E	27-Aug	FN		3368	SFCD	147													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-E	27-Aug	FN		3369	SFCD	145													
Rob Bay	F1-E	27-Aug	FN		3370	SFCD	142													
Rob Bay	F1-E	27-Aug	FN		3371	SFCD	138													
Rob Bay	F1-E	27-Aug	FN		3372	SFCD	137													
Rob Bay	F1-E	27-Aug	FN		3373	SFCD	137													
Rob Bay	F1-E	27-Aug	FN		3374	SFCD	135													
Rob Bay	F1-E	27-Aug	FN		3375	SFCD	132													
Rob Bay	F1-E	27-Aug	FN		3376	SFCD	130													
Rob Bay	F1-E	27-Aug	FN		3377	SFCD	130													
Rob Bay	F1-E	27-Aug	FN		3378	SFCD	128													
Rob Bay	F1-E	27-Aug	FN		3379	SFCD	127													
Rob Bay	F1-E	27-Aug	FN		3380	SFCD	126													
Rob Bay	F1-E	27-Aug	FN		3381	SFCD	125													
Rob Bay	F1-E	27-Aug	FN		3382	SFCD	125													
Rob Bay	F1-E	27-Aug	FN		3383	SFCD	125													
Rob Bay	F1-E	27-Aug	FN		3384	SFCD	121													
Rob Bay	F1-E	27-Aug	FN		3385	SFCD	121													
Rob Bay	F1-E	27-Aug	FN		3386	SFCD	120													
Rob Bay	F1-E	27-Aug	FN		3387	SFCD	111													
Rob Bay	F1-E	27-Aug	FN		3388	SFCD	111													
Rob Bay	F1-E	27-Aug	FN		3389	SFCD	110													
Rob Bay	F1-E	27-Aug	FN		3390	SFCD	110													
Rob Bay	F1-E	27-Aug	FN		3391	SFCD	106													
Rob Bay	F1-E	27-Aug	FN		3392	SFCD	105													
Rob Bay	F1-E	27-Aug	FN		3393	SFCD	100													
Rob Bay	F1-E	27-Aug	FN		3394	SFCD	97													
Rob Bay	F1-E	27-Aug	FN		3395	SFCD	97													
Rob Bay	F1-E	27-Aug	FN		3396	SFCD	96													
Rob Bay	F1-W	27-Aug	FN		3397	SFCD	386													
Rob Bay	F1-W	27-Aug	FN		3398	SFCD	380													
Rob Bay	F1-W	27-Aug	FN		3399	SFCD	380													
Rob Bay	F1-W	27-Aug	FN		3400	SFCD	380													
Rob Bay	F1-W	27-Aug	FN		3401	SFCD	370													
Rob Bay	F1-W	27-Aug	FN		3402	SFCD	365													
Rob Bay	F1-W	27-Aug	FN		3403	SFCD	364													
Rob Bay	F1-W	27-Aug	FN		3404	SFCD	333													
Rob Bay	F1-W	27-Aug	FN		3405	SFCD	326													
Rob Bay	F1-W	27-Aug	FN		3406	SFCD	305													
Rob Bay	F1-W	27-Aug	FN		3407	SFCD	300													
Rob Bay	F1-W	27-Aug	FN		3408	SFCD	295													
Rob Bay	F1-W	27-Aug	FN		3409	SFCD	295													
Rob Bay	F1-W	27-Aug	FN		3410	SFCD	294													
Rob Bay	F1-W	27-Aug	FN		3411	SFCD	291													
Rob Bay	F1-W	27-Aug	FN		3412	SFCD	286													
Rob Bay	F1-W	27-Aug	FN		3413	SFCD	283													
Rob Bay	F1-W	27-Aug	FN		3414	SFCD	275													
Rob Bay	F1-W	27-Aug	FN		3415	SFCD	273													
Rob Bay	F1-W	27-Aug	FN		3416	SFCD	266													
Rob Bay	F1-W	27-Aug	FN		3417	SFCD	235													
Rob Bay	F1-W	27-Aug	FN		3418	SFCD	231													
Rob Bay	F1-W	27-Aug	FN		3419	SFCD	230													
Rob Bay	F1-W	27-Aug	FN		3420	SFCD	226													
Rob Bay	F1-W	27-Aug	FN		3421	SFCD	196													
Rob Bay	F1-W	27-Aug	FN		3422	SFCD	190													
Rob Bay	F1-W	27-Aug	FN		3423	SFCD	183													
Rob Bay	F1-W	27-Aug	FN		3424	SFCD	180													
Rob Bay	F1-W	27-Aug	FN		3425	SFCD	180													
Rob Bay	F1-W	27-Aug	FN		3426	SFCD	180													
Rob Bay	F1-W	27-Aug	FN		3427	SFCD	176													
Rob Bay	F1-W	27-Aug	FN		3428	SFCD	175													
Rob Bay	F1-W	27-Aug	FN		3429	SFCD	170													
Rob Bay	F1-W	27-Aug	FN		3430	SFCD	170													
Rob Bay	F1-W	27-Aug	FN		3431	SFCD	170													
Rob Bay	F1-W	27-Aug	FN		3432	SFCD	170													
Rob Bay	F1-W	27-Aug	FN		3433	SFCD	170													
Rob Bay	F1-W	27-Aug	FN		3434	SFCD	167													
Rob Bay	F1-W	27-Aug	FN		3435	SFCD	164													
Rob Bay	F1-W	27-Aug	FN		3436	SFCD	164													
Rob Bay	F1-W	27-Aug	FN		3437	SFCD	163													
Rob Bay	F1-W	27-Aug	FN		3438	SFCD	162													
Rob Bay	F1-W	27-Aug	FN		3439	SFCD	161													
Rob Bay	F1-W	27-Aug	FN		3440	SFCD	160													
Rob Bay	F1-W	27-Aug	FN		3441	SFCD	156													
Rob Bay	F1-W	27-Aug	FN		3442	SFCD	156													
Rob Bay	F1-W	27-Aug	FN		3443	SFCD	153													
Rob Bay	F1-W	27-Aug	FN		3444	SFCD	150													
Rob Bay	F1-W	27-Aug	FN		3445	SFCD	146													
Rob Bay	F1-W	27-Aug	FN		3446	SFCD	137													
Rob Bay	F1-W	27-Aug	FN		3447	SFCD	123													
Rob Bay	F1-W	27-Aug	FN		3448	SFCD	113													
Rob Bay	F1-W	27-Aug	FN		3449	SFCD	112													
Rob Bay	F1-W	27-Aug	FN		3450	SFCD	112													
Rob Bay	F1-W	27-Aug	FN		3451	SFCD	110													
Rob Bay	F1-W	27-Aug	FN		3452	SFCD	110													
Rob Bay	F1-W	27-Aug	FN		3453	SFCD	105													
Rob Bay	F1-W	27-Aug	FN		3454	SFCD	105													
Rob Bay	F1-W	27-Aug	FN		3455	SFCD	100													
Rob Bay	F1-W	29-Aug	FN		3536	SFCD	158													
Rob Bay	F1-W	29-Aug	FN		3537	SFCD	117													
Rob Bay	F1-W	29-Aug	FN		3538	SFCD	116													
Rob Bay	F1-W	29-Aug	FN		3539	SFCD	113													
Rob Bay	F1-W	29-Aug	FN		3540	SFCD	112													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-W	29-Aug	FN		3541	SFCD	112													
Rob Bay	F1-E	29-Aug	FN		3543	SFCD	298													
Rob Bay	F1-E	29-Aug	FN		3544	SFCD	263													
Rob Bay	F1-E	29-Aug	FN		3545	SFCD	245													
Rob Bay	F1-E	29-Aug	FN		3546	SFCD	237													
Rob Bay	F1-E	29-Aug	FN		3547	SFCD	235													
Rob Bay	F1-E	29-Aug	FN		3548	SFCD	196													
Rob Bay	F1-E	29-Aug	FN		3549	SFCD	195													
Rob Bay	F1-E	29-Aug	FN		3550	SFCD	194													
Rob Bay	F1-E	29-Aug	FN		3551	SFCD	190													
Rob Bay	F1-E	29-Aug	FN		3552	SFCD	186													
Rob Bay	F1-E	29-Aug	FN		3553	SFCD	186													
Rob Bay	F1-E	29-Aug	FN		3554	SFCD	185													
Rob Bay	F1-E	29-Aug	FN		3555	SFCD	185													
Rob Bay	F1-E	29-Aug	FN		3556	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3557	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3558	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3559	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3560	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3561	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3562	SFCD	183													
Rob Bay	F1-E	29-Aug	FN		3563	SFCD	182													
Rob Bay	F1-E	29-Aug	FN		3564	SFCD	182													
Rob Bay	F1-E	29-Aug	FN		3565	SFCD	181													
Rob Bay	F1-E	29-Aug	FN		3566	SFCD	181													
Rob Bay	F1-E	29-Aug	FN		3567	SFCD	180													
Rob Bay	F1-E	29-Aug	FN		3568	SFCD	180													
Rob Bay	F1-E	29-Aug	FN		3569	SFCD	180													
Rob Bay	F1-E	29-Aug	FN		3570	SFCD	177													
Rob Bay	F1-E	29-Aug	FN		3571	SFCD	177													
Rob Bay	F1-E	29-Aug	FN		3572	SFCD	177													
Rob Bay	F1-E	29-Aug	FN		3573	SFCD	176													
Rob Bay	F1-E	29-Aug	FN		3574	SFCD	176													
Rob Bay	F1-E	29-Aug	FN		3575	SFCD	175													
Rob Bay	F1-E	29-Aug	FN		3576	SFCD	175													
Rob Bay	F1-E	29-Aug	FN		3577	SFCD	175													
Rob Bay	F1-E	29-Aug	FN		3578	SFCD	175													
Rob Bay	F1-E	29-Aug	FN		3579	SFCD	174													
Rob Bay	F1-E	29-Aug	FN		3580	SFCD	173													
Rob Bay	F1-E	29-Aug	FN		3581	SFCD	172													
Rob Bay	F1-E	29-Aug	FN		3582	SFCD	172													
Rob Bay	F1-E	29-Aug	FN		3583	SFCD	172													
Rob Bay	F1-E	29-Aug	FN		3584	SFCD	171													
Rob Bay	F1-E	29-Aug	FN		3585	SFCD	171													
Rob Bay	F1-E	29-Aug	FN		3586	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3587	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3588	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3589	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3590	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3591	SFCD	170													
Rob Bay	F1-E	29-Aug	FN		3592	SFCD	168													
Rob Bay	F1-E	29-Aug	FN		3593	SFCD	166													
Rob Bay	F1-E	29-Aug	FN		3594	SFCD	166													
Rob Bay	F1-E	29-Aug	FN		3595	SFCD	166													
Rob Bay	F1-E	29-Aug	FN		3596	SFCD	165													
Rob Bay	F1-E	29-Aug	FN		3597	SFCD	165													
Rob Bay	F1-E	29-Aug	FN		3598	SFCD	165													
Rob Bay	F1-E	29-Aug	FN		3599	SFCD	164													
Rob Bay	F1-E	29-Aug	FN		3600	SFCD	164													
Rob Bay	F1-E	29-Aug	FN		3601	SFCD	163													
Rob Bay	F1-E	29-Aug	FN		3602	SFCD	162													
Rob Bay	F1-E	29-Aug	FN		3603	SFCD	162													
Rob Bay	F1-E	29-Aug	FN		3604	SFCD	160													
Rob Bay	F1-E	29-Aug	FN		3605	SFCD	160													
Rob Bay	F1-E	29-Aug	FN		3606	SFCD	158													
Rob Bay	F1-E	29-Aug	FN		3607	SFCD	157													
Rob Bay	F1-E	29-Aug	FN		3608	SFCD	156													
Rob Bay	F1-E	29-Aug	FN		3609	SFCD	156													
Rob Bay	F1-E	29-Aug	FN		3610	SFCD	155													
Rob Bay	F1-E	29-Aug	FN		3611	SFCD	154													
Rob Bay	F1-E	29-Aug	FN		3612	SFCD	150													
Rob Bay	F1-E	29-Aug	FN		3613	SFCD	137													
Rob Bay	F1-E	29-Aug	FN		3614	SFCD	132													
Rob Bay	F1-E	29-Aug	FN		3615	SFCD	132													
Rob Bay	F1-E	29-Aug	FN		3616	SFCD	130													
Rob Bay	F1-E	29-Aug	FN		3617	SFCD	130													
Rob Bay	F1-E	29-Aug	FN		3618	SFCD	130													
Rob Bay	F1-E	29-Aug	FN		3619	SFCD	130													
Rob Bay	F1-E	29-Aug	FN		3620	SFCD	128													
Rob Bay	F1-E	29-Aug	FN		3621	SFCD	127													
Rob Bay	F1-E	29-Aug	FN		3622	SFCD	126													
Rob Bay	F1-E	29-Aug	FN		3623	SFCD	126													
Rob Bay	F1-E	29-Aug	FN		3624	SFCD	125													
Rob Bay	F1-E	29-Aug	FN		3625	SFCD	124													
Rob Bay	F1-E	29-Aug	FN		3626	SFCD	123													
Rob Bay	F1-E	29-Aug	FN		3627	SFCD	121													
Rob Bay	F1-E	29-Aug	FN		3628	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3629	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3630	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3631	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3632	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3633	SFCD	120													

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Bay	F1-E	29-Aug	FN		3634	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3635	SFCD	120													
Rob Bay	F1-E	29-Aug	FN		3636	SFCD	117													
Rob Bay	F1-E	29-Aug	FN		3637	SFCD	113													
Rob Bay	F1-E	29-Aug	FN		3638	SFCD	113													
Rob Bay	F1-E	29-Aug	FN		3639	SFCD	113													
Rob Bay	F1-E	29-Aug	FN		3640	SFCD	112													
Rob Bay	F1-E	29-Aug	FN		3641	SFCD	112													
Rob Bay	F1-E	29-Aug	FN		3642	SFCD	111													
Rob Bay	F1-E	29-Aug	FN		3643	SFCD	111													
Rob Bay	F1-E	29-Aug	FN		3644	SFCD	110													
Rob Bay	F1-E	29-Aug	FN		3645	SFCD	110													
Rob Bay	F1-E	29-Aug	FN		3646	SFCD	109													
Rob Bay	F1-E	29-Aug	FN		3647	SFCD	109													
Rob Bay	F1-E	29-Aug	FN		3648	SFCD	108													
Rob Bay	F1-E	29-Aug	FN		3649	SFCD	108													
Rob Bay	F1-E	29-Aug	FN		3650	SFCD	108													
Rob Bay	F1-E	29-Aug	FN		3651	SFCD	107													
Rob Bay	F1-E	29-Aug	FN		3652	SFCD	107													
Rob Bay	F1-E	29-Aug	FN		3653	SFCD	107													
Rob Bay	F1-E	29-Aug	FN		3654	SFCD	106													
Rob Bay	F1-E	29-Aug	FN		3655	SFCD	98													
Rob Bay	G09	25-Jul	GN	VM	1196	ARCH	838	5400	0.92	M	2	1								
Rob Bay	G09	25-Jul	GN	VM	1197	ARCH	793	4275	0.86	M	2	1								
Rob Bay	G09	25-Jul	GN	VM	1198	ARCH	545	1515	0.94	M	2	1								
Rob Bay	G03	21-Aug	GN	VM	2451	ARCH	636	3305	1.28	M										
Rob Bay	G03	21-Aug	GN	VM	2452	ARCH	285	255	1.10	F	1	1								
Rob Bay	G01	21-Aug	GN	VM	2454	ARCH	336	455	1.20											
Rob Bay	G01	21-Aug	GN	VM	2455	ARCH	342	395	0.99	F	1	1								
Rob Bay	G01	21-Aug	GN	VM	2456	ARCH	179	50	0.87											
Rob Bay	G07	22-Aug	GN	VM	2736	ARCH	302	300	1.09											
Rob Bay	G11	25-Aug	GN	VM	2822	ARCH	714	3885	1.07	M										
Rob Bay	G12	26-Aug	GN	VM	3211	ARCH	250													
Rob Bay	G02	28-Aug	GN	8.9	3483	ARCH	492	1345	1.13											
Rob Bay	G02	29-Aug	GN	8.9	3523	ARCH	423	810	1.07											
Rob Bay	G02	29-Aug	GN	8.9	3524	ARCH	539	1990	1.27											
Rob Bay	G02	29-Aug	GN	8.9	3525	ARCH	406	765	1.14											
Rob Bay	G05	29-Aug	GN	8.9	3533	ARCH	596	2560	1.21	F	2	1								
Rob Bay	G09	25-Jul	GN	VM	1199	ARFL	308	440	1.51											
Rob Bay	G09	25-Jul	GN	VM	1200	ARFL	298	320	1.21											
Rob Bay	G09	25-Jul	GN	VM	1201	ARFL	288	355	1.49											
Rob Bay	G09	25-Jul	GN	VM	1202	ARFL	264	195	1.06											
Rob Bay	G09	25-Jul	GN	VM	1203	ARFL	200	115	1.44											
Rob Bay	G09	25-Jul	GN	VM	1204	ARFL	196	100	1.33											
Rob Bay	G09	25-Jul	GN	VM	1205	ARFL	187	90	1.38											
Rob Bay	G02	28-Aug	GN	8.9	3484	ARFL	342	805	2.01											
Rob Bay	G02	29-Aug	GN	8.9	3530	ARFL	199	100	1.27											
Rob Bay	G06	25-Aug	GN	VM	2821	CISC	473	1280	1.21	F	2	1								
Rob Bay	G05	29-Aug	GN	8.9	3534	CISC	463	1500	1.51	F	2	1								
Rob Bay	G09	25-Jul	GN	VM	1206	FRSC	370	585	1.15											
Rob Bay	G09	25-Jul	GN	VM	1207	FRSC	357	420	0.92											
Rob Bay	G09	25-Jul	GN	VM	1208	FRSC	337	405	1.06											
Rob Bay	G01	21-Aug	GN	VM	2457	FRSC	362	375	0.79											
Rob Bay	G02	29-Aug	GN	8.9	3529	FRSC	350	360	0.84											
Rob Bay	G02	28-Aug	GN	8.9	3485	GRCD	532	1610	1.07											
Rob Bay	G02	28-Aug	GN	8.9	3486	GRCD	491	1240	1.05											
Rob Bay	G09	25-Jul	GN	VM	1209	PCHR	250	145	0.93	M	2	1								
Rob Bay	G03	21-Aug	GN	VM	2453	PCHR	295	295	1.15	M	2	2								
Rob Bay	G08	22-Aug	GN	VM	2737	PCHR	191	70	1.00											
Rob Bay	G08	22-Aug	GN	VM	2738	PCHR														
Rob Bay	G02	29-Aug	GN	8.9	3531	PCHR	285	250	1.08	F	2	1								
Rob Bay	G02	29-Aug	GN	8.9	3532	PCHR	281	260	1.17	F	2	1								
Rob Bay	G09	25-Jul	GN	VM	1210	SFCD	475	965	0.90											
Rob Bay	G09	25-Jul	GN	VM	1211	SFCD	471	875	0.84											
Rob Bay	G09	25-Jul	GN	VM	1212	SFCD	456	750	0.79											
Rob Bay	G09	25-Jul	GN	VM	1213	SFCD	426	650	0.84											
Rob Bay	G09	25-Jul	GN	VM	1214	SFCD	404	515	0.78											
Rob Bay	G09	25-Jul	GN	VM	1215	SFCD	397	485	0.78											
Rob Bay	G09	25-Jul	GN	VM	1216	SFCD	394	440	0.72											
Rob Bay	G09	25-Jul	GN	VM	1217	SFCD	393	440	0.72											
Rob Bay	G09	25-Jul	GN	VM	1218	SFCD	389	455	0.77											
Rob Bay	G09	25-Jul	GN	VM	1219	SFCD	381	385	0.70											
Rob Bay	G09	25-Jul	GN	VM	1220	SFCD	380	485	0.88											
Rob Bay	G09	25-Jul	GN	VM	1221	SFCD	377	400	0.75											
Rob Bay	G09	25-Jul	GN	VM	1222	SFCD	372	435	0.85											
Rob Bay	G09	25-Jul	GN	VM	1223	SFCD	370	390	0.77											
Rob Bay	G09	25-Jul	GN	VM	1224	SFCD	368	325	0.65											
Rob Bay	G09	25-Jul	GN	VM	1225	SFCD	354	385	0.87											
Rob Bay	G09	25-Jul	GN	VM	1226	SFCD	351	305	0.71											
Rob Bay	G09	25-Jul	GN	VM	1227	SFCD	346	310	0.75											
Rob Bay	G09	25-Jul	GN	VM	1228	SFCD	335	320	0.85											
Rob Bay	G09	25-Jul	GN	VM	1229	SFCD	332	270	0.74											
Rob Bay	G09	25-Jul	GN	VM	1230	SFCD	221	60	0.56											
Rob Bay	G09	25-Jul	GN	VM	1231	SFCD														
Rob Bay	G09	25-Jul	GN	VM	1232	SFCD														
Rob Bay	G09	25-Jul	GN	VM	1233	SFCD														
Rob Bay	G09	25-Jul	GN	VM	1234	SFCD</														

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments		
																	% Full	Contents			
Rob Bay	G09	25-Jul	GN	VM	1240	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1241	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1242	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1243	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1244	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1245	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1246	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1247	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1248	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1249	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1250	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1251	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1252	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1253	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1254	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1255	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1256	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1257	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1258	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1259	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1260	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1261	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1262	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1263	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1264	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1265	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1266	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1267	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1268	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1269	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1270	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1271	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1272	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1273	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1274	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1275	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1276	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1277	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1278	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1279	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1280	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1281	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1282	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1283	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1284	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1285	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1286	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1287	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1288	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1289	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1290	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1291	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1292	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1293	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1294	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1295	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1296	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1297	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1298	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1299	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1300	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1301	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1302	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1303	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1304	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1305	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1306	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1307	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1308	SFCD															
Rob Bay	G09	25-Jul	GN	VM	1309	SFCD															
Rob Bay	G02	28-Aug	GN	8.9	3487	SFCD	441	695	0.81												
Rob Bay	G02	28-Aug	GN	8.9	3488	SFCD	402	525	0.81												
Rob Bay	G02	28-Aug	GN	8.9	3489	SFCD	380	500	0.91												
Rob Bay	G05	28-Aug	GN	8.9	3490	SFCD	442	680	0.79												
Rob Bay	G05	28-Aug	GN	8.9	3491	SFCD	433	665	0.82												
Rob Bay	G05	28-Aug	GN	8.9	3492	SFCD	420	570	0.77												
Rob Bay	G05	28-Aug	GN	8.9	3493	SFCD	420	610	0.82												
Rob Bay	G05	28-Aug	GN	8.9	3494	SFCD	373	440	0.85												
Rob Bay	G02	29-Aug	GN	8.9	3526	SFCD	422	635	0.84												
Rob Bay	G02	29-Aug	GN	8.9	3527	SFCD	424	685	0.90												
Rob Bay	G02	29-Aug	GN	8.9	3528	SFCD	431	705	0.88												
Roberts L	E08	6-Sep	EF		3969	ARCH	137														
Roberts L	u/s FN1	18-Aug	DN		2091	ARCH	696	3750	1.11	F	2	1	Grn	3229	03-2	Mort	0				
Roberts L	F6	30-Aug	FN		3676	ARCH	165														
Roberts L	F6	30-Aug	FN		3677	ARCH	144														
Roberts L	F6	30-Aug	FN		3678	ARCH	127														
Roberts L	F6	29-Aug	FN		3521	LKTR	195														
Roberts L	F6	28-Aug	FN		3477	NNST	50														
Roberts L	G17	29-Aug	GN	1.9	3522	ARCH	90														
Roberts L	G17	28-Aug	GN	1.9	3478	LKTR	635	1955	0.76									Grn	3407		
Rob Out	B3a	7-Aug	BS		1370	ARCH	725	4525	1.19	F								Grn	3048		
Rob Out	B3b	7-Aug	BS		1372	ARCH</															

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Out	B3b	7-Aug	BS		1373	ARCH	705	3430	0.98	F				Grn	3051					
Rob Out	B3c	7-Aug	BS		1375	ARCH	754	5450	1.27	F				Wh	2333	02-2				Tagged 20 Aug 02 in RO FL=731 Wt=4500
Rob Out	B3b	7-Aug	BS		1371	LKTR	477	1295	1.19					Wh	2149	02-1				Tagged 22 Aug 02 in RO FL=460, Wt=1000
Rob Out	B3b	7-Aug	BS		1374	LKTR	755	4310	1.00					Grn	3052					
Rob Out	B3c	7-Aug	BS		1376	LKTR	787	4620	0.95					Grn	3053					
Rob Out	B3d	7-Aug	BS		1377	LKTR	477	1245	1.15					Grn	3054					
Rob Out	E16b	7-Aug	EF		1367	ARCH	686	3715	1.15	F				Grn	3045					
Rob Out	E16b	7-Aug	EF		1368	ARCH	684	4010	1.25	F				Grn	3046					
Rob Out	E16a	10-Aug	EF		1396	ARCH	90	10	1.37											
Rob Out	E16a	10-Aug	EF		1397	ARCH	147	35	1.10											
Rob Out	E16a	10-Aug	EF		1398	ARCH	122	20	1.10											
Rob Out	E16a	10-Aug	EF		1399	ARCH	117	20	1.25											
Rob Out	E16a	10-Aug	EF		1400	ARCH	152	38	1.08											
Rob Out	E16a	10-Aug	EF		1401	ARCH	124	25	1.31											
Rob Out	E16a	10-Aug	EF		1402	ARCH	117	22	1.37											
Rob Out	E16a	10-Aug	EF		1403	ARCH	128	23	1.10											
Rob Out	E16a	10-Aug	EF		1404	ARCH	166	43	0.94	F	1	1								
Rob Out	E16a	10-Aug	EF		1405	ARCH	87	5	0.76	M	1	1								
Rob Out	E16a	8-Sep	EF		4026	ARCH	93													
Rob Out	E16a	8-Sep	EF		4027	ARCH	146													
Rob Out	E16a	8-Sep	EF		4028	ARCH	235													
Rob Out	E16a	8-Sep	EF		4029	ARCH	200													
Rob Out	E16a	8-Sep	EF		4030	ARCH	136													
Rob Out	E16a	8-Sep	EF		4031	ARCH	112													
Rob Out	E16a	8-Sep	EF		4032	ARCH	151													
Rob Out	E16a	8-Sep	EF		4033	ARCH	194													
Rob Out	E16a	8-Sep	EF		4034	ARCH	93													
Rob Out	E16a	8-Sep	EF		4035	ARCH	122													
Rob Out	E16a	8-Sep	EF		4036	ARCH	135													
Rob Out	E16a	8-Sep	EF		4037	ARCH	159													
Rob Out	E16a	8-Sep	EF		4038	ARCH	150													
Rob Out	E16a	8-Sep	EF		4039	ARCH	101													
Rob Out	E16a	8-Sep	EF		4040	ARCH	91													
Rob Out	E16a	8-Sep	EF		4041	ARCH	88													
Rob Out	E16a	8-Sep	EF		4042	ARCH	94													
Rob Out	E16a	8-Sep	EF		4043	ARCH	62													
Rob Out	E16a	8-Sep	EF		4044	ARCH	54													
Rob Out	E16a	8-Sep	EF		4045	ARCH	102													
Rob Out	E16a	8-Sep	EF		4046	ARCH	93													
Rob Out	E16a	8-Sep	EF		4047	ARCH	53													
Rob Out	E16a	8-Sep	EF		4048	ARCH	53													
Rob Out	E16a	8-Sep	EF		4049	ARCH	53													
Rob Out	E16a	8-Sep	EF		4050	ARCH	53													
Rob Out	E16b	8-Sep	EF		4060	ARCH	217	120	1.17											
Rob Out	E16b	8-Sep	EF		4061	ARCH	169	60	1.24											
Rob Out	E16b	8-Sep	EF		4062	ARCH	175	65	1.21											
Rob Out	E16b	8-Sep	EF		4063	ARCH	95	10	1.17											
Rob Out	E16b	8-Sep	EF		4064	ARCH	136	25	0.99											
Rob Out	E16b	8-Sep	EF		4065	ARCH	97	10	1.10											
Rob Out	E16b	8-Sep	EF		4066	ARCH	100	10	1.00											
Rob Out	E16b	8-Sep	EF		4067	ARCH	97	10	1.10											
Rob Out	E16b	8-Sep	EF		4068	ARCH	98	10	1.06											
Rob Out	E16b	8-Sep	EF		4069	ARCH	61													
Rob Out	E16b	8-Sep	EF		4070	ARCH	60													
Rob Out	E16b	7-Aug	EF		1369	LKTR	447							Grn	3047					
Rob Out	E16a	8-Sep	EF		4051	LKTR	94													
Rob Out	E16a	8-Sep	EF		4052	NNST	40													
Rob Out	E16a	8-Sep	EF		4053	NNST	37													
Rob Out	E16a	8-Sep	EF		4054	NNST	35													
Rob Out	E16a	8-Sep	EF		4055	NNST	33													
Rob Out	E16a	8-Sep	EF		4056	NNST	25													
Rob Out	E16a	8-Sep	EF		4057	NNST	30													
Rob Out	E16a	8-Sep	EF		4058	NNST	32													
Rob Out	E16a	8-Sep	EF		4059	NNST	35													
Rob Out	u/s TU	23-Aug	DN		2760	ARCH	700	3770	1.10	F	2	1	Grn	3069	03-1	Mort	0			
Rob Out	u/s TU	5-Sep	DN		3907	ARCH	847	6295	1.04	M	2	1	Grn	3465	03-1	Mort				photo
Rob Out	u/s TU	26-Aug	DN		2836	CISC	362	590	1.24	F	2	1								
Rob Out	u/s TU	26-Aug	DN		2835	LSCS	210	95	1.03											
Rob Out	F5	8-Aug	FN		1385	ARCH								M	2	1				
Rob Out	F5	8-Aug	FN		1386	ARCH								F	2	2				
Rob Out	F5	8-Aug	FN		1387	ARCH								F	2	1				
Rob Out	F5	11-Aug	FN		1415	ARCH	825	6060	1.08	M				Grn	3064	03-1				
Rob Out	F5	11-Aug	FN		1416	ARCH	748	4985	1.19	F				Grn	3066	03-1				
Rob Out	F5	12-Aug	FN		1591	ARCH	585	2720	1.36	F				Grn	3098	03-1				
Rob Out	F5	12-Aug	FN		1592	ARCH	710	3960	1.11	F				Grn	3070	03-1				
Rob Out	F5	12-Aug	FN		1593	ARCH	188	55	0.83											
Rob Out	F5	12-Aug	FN		1594	ARCH	169	45	0.93											
Rob Out	F5	12-Aug	FN		1595	ARCH	180	50	0.86											
Rob Out	F5	12-Aug	FN		1596	ARCH	184	50	0.80											
Rob Out	F5	13-Aug	FN		1598	ARCH	798	5465	1.08	M				Grn	3119	03-1				
Rob Out	F5	13-Aug	FN		1599	ARCH	640	3670	1.40	F				Grn	3115	03-1				
Rob Out	F5	13-Aug	FN		1600	ARCH	714	4285	1.18	F				Grn	3087	03-1				
Rob Out	F5	13-Aug	FN		1601	ARCH	805	6115	1.17	M				Grn	3092	03-1				
Rob Out	F5	13-Aug	FN		1602	ARCH	800	5795	1.13	M				Grn	3099	03-1				
Rob Out	F5	13-Aug	FN		1603	ARCH	825	5465	0.97	M				Grn	3177	03-1				
Rob Out	F5	13-Aug	FN		1604	ARCH	691	4125	1.25	F				Grn	3110	03-1				
Rob Out	F5	13-Aug	FN		1605	ARCH	688	3435	1.05	M				Grn	3092	03-1				

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	F5	13-Aug	FN		1611	ARCH	613	2905	1.26	F			Grn	3104	03-1					
Rob Out	F5	13-Aug	FN		1612	ARCH	814	6150	1.14	M			Grn	3120	03-1					
Rob Out	F5	13-Aug	FN		1613	ARCH	768	5015	1.11	M			Grn	3093	03-1					
Rob Out	F5	13-Aug	FN		1614	ARCH	696	3930	1.17	F			Grn	3172	03-1					
Rob Out	F5	13-Aug	FN		1615	ARCH	731	4270	1.09	F			Grn	3130	03-1					
Rob Out	F5	13-Aug	FN		1616	ARCH	678	3380	1.08	F			Grn	3157	03-1					
Rob Out	F5	13-Aug	FN		1617	ARCH	707	3730	1.06	F			Grn	3160	03-1					
Rob Out	F5	13-Aug	FN		1618	ARCH	717	4175	1.13	F			Wh	2519	02-2					
Rob Out	F5	13-Aug	FN		1619	ARCH	667	3355	1.13	F			Grn	3140	03-1					
Rob Out	F5	13-Aug	FN		1620	ARCH	700	3425	1.00	F			Grn	3159	03-1					
Rob Out	F5	13-Aug	FN		1621	ARCH	633	2920	1.15	F			Grn	3167	03-1					
Rob Out	F5	13-Aug	FN		1622	ARCH	638	3055	1.18	F			Grn	3134	03-1					
Rob Out	F5	13-Aug	FN		1623	ARCH	737	5090	1.27	F			Grn	3166	03-1					
Rob Out	F5	13-Aug	FN		1624	ARCH	769	5060	1.11	F			Grn	3107	03-1					
Rob Out	F5	13-Aug	FN		1625	ARCH	724	4040	1.06	F			Grn	3131	03-1					
Rob Out	F5	13-Aug	FN		1626	ARCH	710	3980	1.11	F			Wh	2317	02-3					
Rob Out	F5	13-Aug	FN		1627	ARCH	780	4860	1.02	F			Grn	3154	03-1					
Rob Out	F5	13-Aug	FN		1628	ARCH	736	5000	1.25	F			Wh	2516	02-2					
Rob Out	F5	14-Aug	FN		1743	ARCH	625	2795	1.14	F			Wh	2312	02-2					
Rob Out	F5	14-Aug	FN		1744	ARCH	770	4590	1.01	F			Grn	3180	03-1					
Rob Out	F5	14-Aug	FN		1745	ARCH	735	4870	1.23	F			Grn	3112	03-1					
Rob Out	F5	14-Aug	FN		1746	ARCH	750	4930	1.17	F			Grn	3174	03-1					
Rob Out	F5	14-Aug	FN		1747	ARCH	645	3290	1.23	F			Wh	2526	02-2					
Rob Out	F5	14-Aug	FN		1748	ARCH	641	3385	1.29	F			Grn	3096	03-1					
Rob Out	F5	14-Aug	FN		1750	ARCH	585	2385	1.19	M			Grn	3153	03-1					
Rob Out	F5	14-Aug	FN		1751	ARCH	561	2270	1.29	F			Grn	3183	03-1					
Rob Out	F5	14-Aug	FN		1753	ARCH	640	3095	1.18	F			Grn	3106	03-1					
Rob Out	F5	14-Aug	FN		1754	ARCH	732	4390	1.12	F			Grn	3101	03-1					
Rob Out	F5	14-Aug	FN		1755	ARCH	765	4950	1.11	F			Grn	3152	03-1					
Rob Out	F5	14-Aug	FN		1757	ARCH	685	3375	1.05	F			Grn	3133	03-1					
Rob Out	F5	14-Aug	FN		1758	ARCH	707	4420	1.25	F			Grn	3173	03-1					
Rob Out	F5	14-Aug	FN		1759	ARCH	738	5025	1.25	F			Grn	3179	03-1					
Rob Out	F5	15-Aug	FN		1763	ARCH	843	6600	1.10	M			Grn	3193	03-1					
Rob Out	F5	15-Aug	FN		1764	ARCH	742	5020	1.23	F			Grn	3195	03-1					
Rob Out	F5	15-Aug	FN		1765	ARCH	748	4260	1.02	F			Grn	3194	03-1					
Rob Out	F5	15-Aug	FN		1766	ARCH	753	5195	1.22	F			Grn	3181	03-1					
Rob Out	F5	15-Aug	FN		1767	ARCH	727	4535	1.18	F			Grn	3192	03-1					
Rob Out	F5	15-Aug	FN		1768	ARCH	770	4540	0.99	F			Grn	3067	03-1					
Rob Out	F5	16-Aug	FN		2010	ARCH	782	5565	1.16				Wh	2511	02-2					
Rob Out	F5	16-Aug	FN		2012	ARCH	690	3975	1.21	F			Grn	3199	03-1					
Rob Out	F5	16-Aug	FN		2013	ARCH	671	3810	1.26	F			Grn	3200	03-1					
Rob Out	F5	16-Aug	FN		2014	ARCH	817	6355	1.17	M			Grn	3201	03-1					
Rob Out	F5	16-Aug	FN		2015	ARCH	677	3590	1.16	F			Grn	3203	03-1					
Rob Out	F5	16-Aug	FN		2016	ARCH	733	4855	1.23	F			Grn	3204	03-1					
Rob Out	F5	16-Aug	FN		2017	ARCH	736	3855	0.97				Grn	3207	03-1					
Rob Out	F5	17-Aug	FN		2042	ARCH	685	4205	1.31				Wh	2509	02-2					
Rob Out	F5	17-Aug	FN		2043	ARCH	838	6355	1.08	M			Grn	3227	03-1					
Rob Out	F5	17-Aug	FN		2044	ARCH	753	5610	1.31	M			Grn	3234	03-1					
Rob Out	F5	17-Aug	FN		2045	ARCH	726	4420	1.16	F			Grn	3221	03-1					
Rob Out	F5	17-Aug	FN		2046	ARCH	688	3680	1.13	F			Grn	3224	03-1					
Rob Out	F5	17-Aug	FN		2047	ARCH	828	4895	0.86	M			Grn	3219	03-1					
Rob Out	F5	17-Aug	FN		2048	ARCH	740	5065	1.25	F			Grn	3220	03-1					
Rob Out	F5	17-Aug	FN		2049	ARCH	775	6450	1.39				Grn	3085	03-1					
Rob Out	F5	17-Aug	FN		2050	ARCH	750	4290	1.02	F			Grn	3210	03-1					
Rob Out	F5	17-Aug	FN		2051	ARCH	622	3195	1.33	F			Grn	3228	03-1					
Rob Out	F5	17-Aug	FN		2053	ARCH	535	1705	1.11	F			Grn	3226	03-1					
Rob Out	F5	17-Aug	FN		2054	ARCH	709	4365	1.22	F			Grn	3208	03-1					
Rob Out	F5	17-Aug	FN		2055	ARCH	882	6615	0.96	M			Grn	3205	03-1					
Rob Out	F5	17-Aug	FN		2056	ARCH	713	4065	1.12	F			Grn	3182	03-1					
Rob Out	F5	17-Aug	FN		2058	ARCH	768	4665	1.03	F			Grn	3216	03-1					
Rob Out	F5	17-Aug	FN		2059	ARCH	696	3750	1.11	F			Grn	3229	03-1					
Rob Out	F5	17-Aug	FN		2060	ARCH	742	4750	1.16	F			Grn	3233	03-1					
Rob Out	F5	17-Aug	FN		2061	ARCH	804	5475	1.05	F			Grn	3165	03-1					
Rob Out	F5	17-Aug	FN		2062	ARCH	875	7205	1.08	M			Grn	3126	03-1					
Rob Out	F5	17-Aug	FN		2063	ARCH	804	5150	0.99	F			Grn	3068	03-1					
Rob Out	F5	17-Aug	FN		2064	ARCH	725	4525	1.19	F			Grn	3048	03-1					
Rob Out	F5	17-Aug	FN		2065	ARCH	851	6565	1.07	M			Grn	3218	03-1					
Rob Out	F5	17-Aug	FN		2067	ARCH	664	3400	1.16	F			Grn	3213	03-1					
Rob Out	F5	17-Aug	FN		2068	ARCH	638	2735	1.05	F			Grn	3151	03-1					
Rob Out	F5	17-Aug	FN		2069	ARCH	762	4935	1.12	F			Grn	3212	03-1					
Rob Out	F5	17-Aug	FN		2070	ARCH	756	4880	1.13	F			Grn	3090	03-1					
Rob Out	F5	17-Aug	FN		2071	ARCH	747	5035	1.21	F			Grn	3215	03-1					
Rob Out	F5	17-Aug	FN		2073	ARCH	767	5125	1.14	F			Grn	3211	03-1					
Rob Out	F5	18-Aug	FN		2087	ARCH	674	3535	1.15	F			Grn	3250	03-1					
Rob Out	F5	18-Aug	FN		2088	ARCH	722	4205	1.12	F			Grn	3357	03-1					
Rob Out	F5	18-Aug	FN		2089	ARCH	505	1220	0.95				Grn	3352	03-1					
Rob Out	F5	18-Aug	FN		2090	ARCH	479	1345	1.22				Grn	3355	03-1					
Rob Out	F5	19-Aug	FN		2108	ARCH	801	5165	1.01	F										

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	F5	20-Aug	FN		2367	ARCH	438	885	1.05					Wh	2220	02-3				Tagged 26 Aug 02 in RO FL=396 Wt=600
Rob Out	F5	20-Aug	FN		2368	ARCH	530	1715	1.15					Wh	2325	02-2				Tagged 20 Aug 02 in RO FL=484 Wt= 1200
Rob Out	F5	20-Aug	FN		2369	ARCH	654	3350	1.20	F				Grn	3252	03-1				
Rob Out	F5	20-Aug	FN		2370	ARCH	747	4735	1.14	F				Grn	3263	03-1				
Rob Out	F5	20-Aug	FN		2371	ARCH	726	5165	1.35	M				Grn	3264	03-1				
Rob Out	F5	20-Aug	FN		2372	ARCH	763	5045	1.14	M				Grn	3265	03-1				
Rob Out	F5	20-Aug	FN		2373	ARCH	757	5085	1.17	F				Grn	3266	03-1				
Rob Out	F5	20-Aug	FN		2374	ARCH	679	3520	1.12	F				Grn	3267	03-1				
Rob Out	F5	20-Aug	FN		2375	ARCH	728	4680	1.21	M				Grn	3268	03-1				
Rob Out	F5	20-Aug	FN		2377	ARCH	688	4095	1.26	F				Grn	3270	03-1				
Rob Out	F5	20-Aug	FN		2378	ARCH	132	20	0.87											Mort
Rob Out	F5	20-Aug	FN		2379	ARCH	156	35	0.92											
Rob Out	F5	21-Aug	FN		2420	ARCH								Wh	2507	02-1				
Rob Out	F5	21-Aug	FN		2421	ARCH	754	4765	1.11	M				Grn	3271	03-1				
Rob Out	F5	21-Aug	FN		2422	ARCH	736	4640	1.16	M				Grn	3272	03-1				
Rob Out	F5	21-Aug	FN		2423	ARCH	745	4235	1.02	M				Grn	3273	03-1				
Rob Out	F5	21-Aug	FN		2424	ARCH	736	4015	1.01	M				Grn	3274	03-1				
Rob Out	F5	21-Aug	FN		2425	ARCH	730	4415	1.13	F				Grn	3275	03-1				
Rob Out	F5	21-Aug	FN		2426	ARCH	503	1435	1.13					Grn	3276	03-1				
Rob Out	F5	21-Aug	FN		2427	ARCH	643	3335	1.25	F				Grn	3277	03-1				
Rob Out	F5	21-Aug	FN		2428	ARCH	467	1135	1.11					Grn	3278	03-1				
Rob Out	F5	21-Aug	FN		2429	ARCH	728	3740	0.97	F				Grn	3279	03-1				
Rob Out	F5	21-Aug	FN		2430	ARCH	603	3160	1.44	F				Grn	3281	03-1				
Rob Out	F5	21-Aug	FN		2431	ARCH	749	4510	1.07	M				Grn	3282	03-1				
Rob Out	F5	21-Aug	FN		2432	ARCH	510	1750	1.32					Grn	3283	03-1				
Rob Out	F5	21-Aug	FN		2433	ARCH	650	3500	1.27	F				Grn	3284	03-1				
Rob Out	F5	21-Aug	FN		2434	ARCH	312	300	0.99					Grn	3288	03-1				
Rob Out	F5	22-Aug	FN		2458	ARCH	765	5480	1.22	M				Grn	3302	03-1				
Rob Out	F5	22-Aug	FN		2463	ARCH	597	2515	1.18	F				Grn	3309	03-1				
Rob Out	F5	22-Aug	FN		2464	ARCH	882	5680	0.83	M				Grn	3303	03-1				
Rob Out	F5	22-Aug	FN		2465	ARCH	346	470	1.13					Wh	2228	02-3				
Rob Out	F5	22-Aug	FN		2466	ARCH	732	4495	1.15	F				Grn	3304	03-1				
Rob Out	F5	22-Aug	FN		2468	ARCH	675	3245	1.06	M				Grn	3297	03-1				
Rob Out	F5	22-Aug	FN		2469	ARCH	728	4085	1.06	M				Grn	3305	03-1				
Rob Out	F5	22-Aug	FN		2470	ARCH	648	2835	1.04	F				Wh	2505	02-2				
Rob Out	F5	22-Aug	FN		2471	ARCH	875	7780	1.16	M				Grn	3298	03-1				
Rob Out	F5	22-Aug	FN		2472	ARCH	482	1315	1.17	M				Grn	3307	03-1				
Rob Out	F5	22-Aug	FN		2473	ARCH	716	4925	1.34					Grn	3312	03-1				
Rob Out	F5	23-Aug	FN		2742	ARCH	730	4220	1.08	F				Grn	3317	03-1				
Rob Out	F5	23-Aug	FN		2743	ARCH	646	2530	0.94	F				Grn	3322	03-1				
Rob Out	F5	23-Aug	FN		2744	ARCH	724	4355	1.15	F				Grn	3318	03-1				
Rob Out	F5	23-Aug	FN		2745	ARCH	787	5155	1.06	M				Grn	3321	03-1				
Rob Out	F5	23-Aug	FN		2746	ARCH	465	1205	1.20					Wh	2223	02-3				
Rob Out	F5	23-Aug	FN		2747	ARCH	893	7045	0.99	M				Grn	3314	03-1				
Rob Out	F5	23-Aug	FN		2748	ARCH	673	3960	1.30	F				Grn	3108	03-1				
Rob Out	F5	23-Aug	FN		2749	ARCH	611	2665	1.17	M				Grn	3323	03-1				
Rob Out	F5	23-Aug	FN		2750	ARCH	209	105	1.15											
Rob Out	F5	23-Aug	FN		2751	ARCH	160	40	0.98											
Rob Out	F5	24-Aug	FN		2766	ARCH	713	4510	1.24	F				Grn	3299	03-1				
Rob Out	F5	24-Aug	FN		2767	ARCH	705	3760	1.07	F				Grn	3329	03-1				
Rob Out	F5	24-Aug	FN		2769	ARCH	715	3500	0.96	F				Grn	3326	03-1				
Rob Out	F5	24-Aug	FN		2771	ARCH	814			M				Grn	3338	03-1				
Rob Out	F5	24-Aug	FN		2772	ARCH	738			F				Grn	3339	03-1				
Rob Out	F5	24-Aug	FN		2773	ARCH	721			F				Grn	3340	03-1				
Rob Out	F5	25-Aug	FN		2793	ARCH	763	5320	1.20	M				Grn	3343	03-1				
Rob Out	F5	25-Aug	FN		2794	ARCH	612	2540	1.11	M				Grn	3364	03-1				
Rob Out	F5	25-Aug	FN		2795	ARCH	798	5590	1.10	M				Grn	3344	03-1				
Rob Out	F5	25-Aug	FN		2796	ARCH	576	2245	1.17	M				Grn	3368	03-1				
Rob Out	F5	25-Aug	FN		2797	ARCH	476	1060	0.98					Grn	3359	03-1				
Rob Out	F5	25-Aug	FN		2798	ARCH	617	2990	1.27	F				Grn	3341	03-1				
Rob Out	F5	25-Aug	FN		2799	ARCH	671	3645	1.21	M				Grn	3342	03-1				
Rob Out	F5	25-Aug	FN		2801	ARCH	562	2110	1.19					Grn	3349	03-1				
Rob Out	F5	25-Aug	FN		2802	ARCH	458	1065	1.11					Grn	3347	03-1				
Rob Out	F5	25-Aug	FN		2803	ARCH	485	1285	1.13					Grn	3360	03-1				
Rob Out	F5	26-Aug	FN		2823	ARCH	757	5495	1.27	F				Grn	3372	03-1				
Rob Out	F5	26-Aug	FN		2824	ARCH	623	2675	1.11	F				Grn	3374	03-1				
Rob Out	F5	27-Aug	FN		3213	ARCH	856	5580	0.89	M				Grn	3371	03-1				
Rob Out	F5	27-Aug	FN		3214	ARCH	365	620	1.28					Grn	3387	03-1				
Rob Out	F5	27-Aug	FN		3215	ARCH	449	1015	1.12					Grn	3389	03-1				
Rob Out	F5	27-Aug	FN		3216	ARCH	758	4260	0.98	M				Grn	3391	03-1				
Rob Out	F5	27-Aug	FN		3217	ARCH	585	2450	1.22	F				Grn	3392	03-1				
Rob Out	F5	27-Aug	FN		3218	ARCH	251	150	0.95											
Rob Out	F5	27-Aug	FN		3219	ARCH	240													
Rob Out	F5	27-Aug	FN		3220	ARCH	348	435	1.03											
Rob Out	F5	27-Aug	FN		3221	ARCH	325	415	1.21											
Rob Out	F5	27-Aug	FN		3222	ARCH	218	110	1.06											
Rob Out	F5	28-Aug	FN		3458	ARCH	715	3180	0.87	M				Grn	3393	03-1				
Rob Out	F5	28-Aug	FN		3459	ARCH	430	805	1.01					Grn	3394	03-1				
Rob Out	F5	28-Aug	FN		3461	ARCH	190	75	1.09											
Rob Out	F5	28-Aug	FN		3462	ARCH	220</													

#### Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	F5	29-Aug	FN		3504	ARCH	312	360	1.19					Grn	3403	03-1				
Rob Out	F5	29-Aug	FN		3505	ARCH	273	205	1.01											
Rob Out	F5	29-Aug	FN		3506	ARCH	255	190	1.15											
Rob Out	F5	29-Aug	FN		3507	ARCH	268	195	1.01											
Rob Out	F5	29-Aug	FN		3508	ARCH	207	110	1.24											
Rob Out	F5	29-Aug	FN		3509	ARCH	192	75	1.06											
Rob Out	F5	29-Aug	FN		3510	ARCH	175	55	1.03											
Rob Out	F5	29-Aug	FN		3511	ARCH	198	85	1.10											
Rob Out	F5	29-Aug	FN		3512	ARCH	175	55	1.03											
Rob Out	F5	29-Aug	FN		3513	ARCH	176	65	1.19											
Rob Out	F5	29-Aug	FN		3514	ARCH	135	20	0.81					Grn	3410	03-1				
Rob Out	F5	30-Aug	FN		3656	ARCH	821	6580	1.19	M				Grn	3412	03-1				
Rob Out	F5	30-Aug	FN		3657	ARCH	343	500	1.24					Grn	3414	03-1				
Rob Out	F5	30-Aug	FN		3658	ARCH	340	425	1.08					Grn	3415	03-1				
Rob Out	F5	30-Aug	FN		3659	ARCH	472	1230	1.17											Tag scar, new tag applied. Adipose clipped
Rob Out	F5	30-Aug	FN		3664	ARCH	171	50	1.00											
Rob Out	F5	30-Aug	FN		3665	ARCH	178	65	1.15											
Rob Out	F5	30-Aug	FN		3666	ARCH	242	175	1.23											
Rob Out	F5	30-Aug	FN		3667	ARCH	191	90	1.29											
Rob Out	F5	30-Aug	FN		3668	ARCH	200	90	1.13											
Rob Out	F5	30-Aug	FN		3669	ARCH	172	55	1.08											
Rob Out	F5	30-Aug	FN		3670	ARCH	152	35	1.00											
Rob Out	F5	31-Aug	FN		3719	ARCH	674	2940	0.96	F				Grn	3420	03-1				
Rob Out	F5	31-Aug	FN		3720	ARCH	825	6430	1.15					Grn	3422	03-1				
Rob Out	F5	31-Aug	FN		3721	ARCH	680	3640	1.16					Grn	3421	03-1				
Rob Out	F5	31-Aug	FN		3722	ARCH	727	4295	1.12					Grn	3423	03-1				
Rob Out	F5	31-Aug	FN		3723	ARCH	262	220	1.22											
Rob Out	F5	31-Aug	FN		3724	ARCH	271	215	1.08											
Rob Out	F5	31-Aug	FN		3725	ARCH	182	80	1.33											
Rob Out	F5	31-Aug	FN		3726	ARCH	285	290	1.25											
Rob Out	F5	31-Aug	FN		3727	ARCH	146	35	1.12											
Rob Out	F5	31-Aug	FN		3728	ARCH	87	5	0.76											
Rob Out	F5	1-Sep	FN		3735	ARCH	685	4365	1.36	M				Grn	3436	03-1				
Rob Out	F5	1-Sep	FN		3736	ARCH	790	5345	1.08					Grn	3434	03-1				
Rob Out	F5	1-Sep	FN		3737	ARCH	423	760	1.00					Grn	3439	03-1				
Rob Out	F5	1-Sep	FN		3738	ARCH	733	4195	1.07					Grn	3435	03-1				
Rob Out	F5	1-Sep	FN		3739	ARCH	354	505	1.14					Grn	3438	03-1				
Rob Out	F5	1-Sep	FN		3740	ARCH	352	445	1.02					Grn	3437	03-1				
Rob Out	F5	1-Sep	FN		3742	ARCH	237	140	1.05											
Rob Out	F5	1-Sep	FN		3743	ARCH	287	290	1.23											
Rob Out	F5	1-Sep	FN		3744	ARCH	332	365	1.00					Grn	3440					
Rob Out	F5	1-Sep	FN		3745	ARCH	234	140	1.09											
Rob Out	F5	1-Sep	FN		3746	ARCH	247	140	0.93											
Rob Out	F5	1-Sep	FN		3747	ARCH	220	105	0.99											
Rob Out	F5	1-Sep	FN		3748	ARCH	157	40	1.03											
Rob Out	F5	1-Sep	FN		3749	ARCH	170	45	0.92											
Rob Out	F5	1-Sep	FN		3750	ARCH	96	10	1.13											
Rob Out	F5	2-Sep	FN		3773	ARCH	349	450	1.06					Grn	3443	03-1				
Rob Out	F5	2-Sep	FN		3774	ARCH	351	410	0.95					Grn	3444	03-1				
Rob Out	F5	2-Sep	FN		3775	ARCH	331	355	0.98					Grn	3451					
Rob Out	F5	2-Sep	FN		3776	ARCH	307	285	0.98					Grn	3452					
Rob Out	F5	2-Sep	FN		3777	ARCH	267	195	1.02											
Rob Out	F5	2-Sep	FN		3778	ARCH	238	145	1.08											
Rob Out	F5	2-Sep	FN		3779	ARCH	273	215	1.06											
Rob Out	F5	2-Sep	FN		3780	ARCH	285	240	1.04											
Rob Out	F5	2-Sep	FN		3781	ARCH	247	145	0.96											
Rob Out	F5	2-Sep	FN		3782	ARCH	207	60	0.68											
Rob Out	F5	2-Sep	FN		3783	ARCH	172	35	0.69											
Rob Out	F5	2-Sep	FN		3784	ARCH	282	220	0.98											
Rob Out	F5	2-Sep	FN		3785	ARCH	248	140	0.92											
Rob Out	F5	2-Sep	FN		3786	ARCH	246	130	0.87											
Rob Out	F5	2-Sep	FN		3787	ARCH	265	170	0.91											
Rob Out	F5	2-Sep	FN		3788	ARCH	277	190	0.89											
Rob Out	F5	2-Sep	FN		3789	ARCH	253	170	1.05											
Rob Out	F5	2-Sep	FN		3790	ARCH	258	160	0.93											
Rob Out	F5	2-Sep	FN		3791	ARCH	235	125	0.96											
Rob Out	F5	2-Sep	FN		3792	ARCH	232	90	0.72											
Rob Out	F5	2-Sep	FN		3793	ARCH	211	65	0.69											
Rob Out	F5	2-Sep	FN		3794	ARCH	209	75	0.82											
Rob Out	F5	2-Sep	FN		3795	ARCH	170	35	0.71											
Rob Out	F5	2-Sep	FN		3796	ARCH	148	25	0.77											
Rob Out	F5	2-Sep	FN		3797	ARCH	163	35	0.81											
Rob Out	F5	3-Sep	FN		3849	ARCH	750	5120	1.21	F				Grn	3453	03-1				
Rob Out	F5	3-Sep	FN		3850	ARCH	498	1350	1.09					Grn	3454	03-1				
Rob Out	F5	3-Sep	FN		3851	ARCH	355	470	1.05					Grn	3455	03-1				
Rob Out	F5	3-Sep	FN		3852	ARCH	329	400	1.12					Grn	3456	03-1				
Rob Out	F5	3-Sep	FN		3853	ARCH	311	260	0.86					Grn	3457					
Rob Out	F5	3-Sep	FN		3854	ARCH	274	205	1.00											
Rob Out	F5	3-Sep	FN		3855	ARCH	231	140	1.14											
Rob Out	F5	3-Sep	FN		3856	ARCH	239	140	1.03											
Rob Out	F5	3-Sep	FN		3857	ARCH	106	15	1.26											
Rob Out	F5	4-Sep	FN		3869	ARCH	472	1200	1.14					Grn	3460	03-1				
Rob Out	F5	4-Sep	FN		3870	ARCH	302	280	1.02					Grn	3461					
Rob Out	F5	4-Sep	FN		3871	ARCH	230	140	1.15											
Rob Out	F5	4-Sep	FN		3872	ARCH	234	140	1.09											
Rob Out	F5	4-Sep	FN		3873	ARCH	241	155	1.11											
Rob Out	F5	4-Sep	FN		3874	ARCH	146	40	1.29											
Rob Out	F5	4-Sep	FN		3875	ARCH	146	35	1.12											
Rob Out	F5	5-Sep	FN		3886	ARCH	861	5925	0.93					Grn	3463	03-1				
Rob Out	F5	5-Sep	FN		3887	ARCH	393	650	1.07					Grn	3466	03-1				
Rob Out	F5	5-Sep	FN		3888	ARCH	450	950	1.04					Grn	3467	03-1				
Rob Out	F5	5-Sep	FN		3889	ARCH	545	1315	0.81					Grn	3468	03-1				

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	F5	5-Sep	FN	3890	ARCH	440	905	1.06					Grn	3469	03-1					
Rob Out	F5	5-Sep	FN	3891	ARCH	345	440	1.07					Grn	3470						
Rob Out	F5	5-Sep	FN	3892	ARCH	291	250	1.01												
Rob Out	F5	5-Sep	FN	3893	ARCH	296	265	1.02												
Rob Out	F5	5-Sep	FN	3894	ARCH	283	235	1.04												
Rob Out	F5	5-Sep	FN	3895	ARCH	239	145	1.06												
Rob Out	F5	5-Sep	FN	3896	ARCH	211	110	1.17												
Rob Out	F5	5-Sep	FN	3897	ARCH	208	90	1.00												
Rob Out	F5	5-Sep	FN	3898	ARCH	232	130	1.04												
Rob Out	F5	5-Sep	FN	3899	ARCH	233	135	1.07												
Rob Out	F5	5-Sep	FN	3900	ARCH	236	125	0.95												
Rob Out	F5	5-Sep	FN	3901	ARCH	203	100	1.20												
Rob Out	F5	6-Sep	FN	3935	ARCH	378	615	1.14					Grn	3471	03-1					
Rob Out	F5	6-Sep	FN	3936	ARCH	354	445	1.00					Grn	3472	03-1					
Rob Out	F5	6-Sep	FN	3937	ARCH	412	715	1.02					Grn	3473	03-1					
Rob Out	F5	6-Sep	FN	3938	ARCH	362	470	0.99					Grn	3474	03-1					
Rob Out	F5	6-Sep	FN	3939	ARCH	341	435	1.10					Grn	3475						
Rob Out	F5	6-Sep	FN	3940	ARCH	211	95	1.01												
Rob Out	F5	6-Sep	FN	3941	ARCH	287	265	1.12												
Rob Out	F5	6-Sep	FN	3942	ARCH	218	105	1.01												
Rob Out	F5	6-Sep	FN	3943	ARCH	220	120	1.13												
Rob Out	F5	6-Sep	FN	3944	ARCH	229	130	1.08												
Rob Out	F5	6-Sep	FN	3945	ARCH	290	260	1.07												
Rob Out	F5	6-Sep	FN	3946	ARCH	293	285	1.13												
Rob Out	F5	6-Sep	FN	3947	ARCH	270	210	1.07												
Rob Out	F5	6-Sep	FN	3948	ARCH	220	105	0.99												
Rob Out	F5	6-Sep	FN	3949	ARCH	245	150	1.02												
Rob Out	F5	6-Sep	FN	3950	ARCH	210	95	1.03												
Rob Out	F5	6-Sep	FN	3951	ARCH	266	190	1.01												
Rob Out	F5	6-Sep	FN	3952	ARCH	206	85	0.97												
Rob Out	F5	6-Sep	FN	3953	ARCH	257	180	1.06												
Rob Out	F5	6-Sep	FN	3954	ARCH	209	85	0.93												
Rob Out	F5	6-Sep	FN	3955	ARCH	259	195	1.12												
Rob Out	F5	6-Sep	FN	3956	ARCH	218	90	0.87												
Rob Out	F5	7-Sep	FN	3985	ARCH	803	4630	0.89	M				Grn	3441	03-1					
Rob Out	F5	7-Sep	FN	3986	ARCH	338	380	0.98					Grn	3476						
Rob Out	F5	7-Sep	FN	3987	ARCH	319	235	0.72					Grn	3477						
Rob Out	F5	7-Sep	FN	3988	ARCH	263	190	1.04												
Rob Out	F5	7-Sep	FN	3989	ARCH	290	270	1.11												
Rob Out	F5	7-Sep	FN	3990	ARCH	264	190	1.03												
Rob Out	F5	7-Sep	FN	3991	ARCH	232	135	1.08												
Rob Out	F5	7-Sep	FN	3992	ARCH	284	240	1.05												
Rob Out	F5	8-Sep	FN	4010	ARCH	850	7535	1.23					Grn	3478	03-1					
Rob Out	F5	8-Sep	FN	4011	ARCH	470	1110	1.07					Grn	3479	03-1					
Rob Out	F5	8-Sep	FN	4012	ARCH	449	860	0.95					Grn	3480	03-1					
Rob Out	F5	8-Sep	FN	4013	ARCH	359							Grn	3483						
Rob Out	F5	8-Sep	FN	4014	ARCH	340							Grn	3486						
Rob Out	F5	8-Sep	FN	4015	ARCH	291	240	0.97												
Rob Out	F5	8-Sep	FN	4016	ARCH	275	220	1.06												
Rob Out	F5	8-Sep	FN	4017	ARCH	208	90	1.00												
Rob Out	F5	8-Sep	FN	4018	ARCH	221	115	1.07												
Rob Out	F5	8-Sep	FN	4019	ARCH	254	185	1.13												
Rob Out	F5	8-Sep	FN	4020	ARCH	283	255	1.13												
Rob Out	F5	8-Sep	FN	4021	ARCH	226	130	1.13												
Rob Out	F5	8-Sep	FN	4022	ARCH	267														
Rob Out	F5	8-Sep	FN	4023	ARCH	221														
Rob Out	F5	8-Sep	FN	4024	ARCH	252														
Rob Out	F5	8-Sep	FN	4025	ARCH	253														
Rob Out	F5	17-Aug	FN	2057	BRWH	511	2160	1.62					Grn	3056	03-1					
Rob Out	F5	3-Sep	FN	3858	CISC	190	65	0.95												
Rob Out	F5	3-Sep	FN	3859	CISC	240	160	1.16												
Rob Out	F5	8-Aug	FN	1384	LKTR	159	30	0.75												
Rob Out	F5	10-Aug	FN	1406	LKTR	387	770	1.33					Grn	3062						
Rob Out	F5	10-Aug	FN	1407	LKTR	453	1230	1.32					Grn	3063						
Rob Out	F5	11-Aug	FN	1417	LKTR	480	1240	1.12					Wh	2149	02-2					
Rob Out	F5	11-Aug	FN	1418	LKTR	388	720	1.23					Blu	41	00-1					
Rob Out	F5	11-Aug	FN	1419	LKTR	393	665	1.10					Grn	3071						
Rob Out	F5	14-Aug	FN	1749	LKTR	380	625	1.14					Grn	3168	03-1					
Rob Out	F5	14-Aug	FN	1752	LKTR	448	925	1.03					Grn	3169	03-1					
Rob Out	F5	14-Aug	FN	1756	LKTR	456	980	1.03					Grn	3185	03-1					
Rob Out	F5	15-Aug	FN	1769	LKTR	393	705	1.16					Grn	3198	03-1					
Rob Out	F5	15-Aug	FN	1770	LKTR	755	4310	1.00					Grn	3052	03-1					
Rob Out	F5	16-Aug	FN	2009	LKTR	463	1190	1.20					Wh	2151	02-2					
Rob Out	F5	16-Aug	FN	2011	LKTR	455	1165	1.24					Grn	3197	03-1					
Rob Out	F5	17-Aug	FN	2052	LKTR	410	780	1.13					Grn	3232	03-1					
Rob Out	F5	17-Aug	FN	2066	LKTR	477	1245	1.15					Grn	3054	03-1					
Rob Out	F5	17-Aug	FN	2072	LKTR	414	905	1.28					Grn	3206	03-1					
Rob Out	F5	17-Aug	FN	2074	LKTR	419	860	1.17					Blu	23	00-2					
Rob Out	F5	20-Aug	FN	2376	LKTR	604	2155	0.98					Grn	3269	03-1					
Rob Out	F5	22-Aug	FN	2459	LKTR	356	465	1.03					Grn	3308	03-1					
Rob Out	F5	22-Aug	FN	2460	LKTR	425	930	1.21					Grn	3286	03-1					
Rob Out	F5	22-Aug	FN	2461	LKTR	444	1220	1.39					Grn	3301	03-1					
Rob Out	F5	22-Aug	FN	2462	LKTR	428	760	0.97					Grn	3285						

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mort- ality	Stomach		Comments	
																	% Full	Contents		
Rob Out	F5	31-Aug	FN	3718	LKTR	351	430	0.99						Grn	3408	03-2				
Rob Out	F5	1-Sep	FN	3741	LKTR	635	1955	0.76						Grn	3407	03-1				
Rob Out	F5	3-Sep	FN	3848	LKTR	447	1040	1.16						Grn	3047	03-1				
Rob Out	F5	5-Sep	FN	3885	LKTR	384	605	1.07						Wh	2287	02-2				
Rob Out	F5	27-Aug	FN	3223	LSCS	214	105	1.07												
Rob Out	F5	27-Aug	FN	3224	LSCS	238	145	1.08												
Rob Out	F5	30-Aug	FN	3660	LSCS	192	75	1.06												
Rob Out	F5	30-Aug	FN	3661	LSCS	196	80	1.06												
Rob Out	F5	30-Aug	FN	3662	LSCS	205	90	1.04												
Rob Out	F5	30-Aug	FN	3663	LSCS	193	70	0.97												
Rob Out	1100	7-Aug	TU	1380	ARCH	820	6875	1.25	M					Grn	3338					
Rob Out	1100	7-Aug	TU	1381	ARCH	858	7135	1.13	M					Grn	3061					
Rob Out	1100	7-Aug	TU	1382	ARCH	830	6710	1.17	M	2	1									
Rob Out	1100	7-Aug	TU	1383	ARCH	822	6765	1.22	M	2	1									
Rob Out	1120	10-Aug	TU	1408	ARCH	825	6060	1.08	M					Grn	3064					
Rob Out	1120	10-Aug	TU	1409	ARCH	805	6110	1.17	F					Grn	3065					
Rob Out	1120	10-Aug	TU	1410	ARCH	748	4985	1.19	F					Grn	3066					
Rob Out	1120	10-Aug	TU	1411	ARCH	770	4540	0.99	F					Grn	3067					
Rob Out	1120	10-Aug	TU	1412	ARCH	804	5150	0.99	F					Grn	3068					
Rob Out	1020	11-Aug	TU	1413	ARCH	700	3770	1.10	F					Grn	3069					
Rob Out	1020	11-Aug	TU	1414	ARCH	710	3960	1.11	F					Grn	3070					
Rob Out	1335	12-Aug	TU	1523	ARCH	625	2795	1.14	F					Wh	2312	02-1				
Rob Out	1335	12-Aug	TU	1524	ARCH	710	3980	1.11	F					Wh	2317	02-2				
Rob Out	1335	12-Aug	TU	1525	ARCH	688	3435	1.05	M					Wh	2321	02-2				
Rob Out	1335	12-Aug	TU	1526	ARCH	666	3205	1.08	F					Wh	2344	02-2				
Rob Out	1335	12-Aug	TU	1527	ARCH	736	5000	1.25	F					Wh	2516	02-1				
Rob Out	1335	12-Aug	TU	1528	ARCH	717	4175	1.13	F					Wh	2519	02-1				
Rob Out	1335	12-Aug	TU	1529	ARCH	645	3290	1.23	F					Wh	2526	02-1				
Rob Out	1335	12-Aug	TU	1530	ARCH	847	7125	1.17	M					Grn	3084					
Rob Out	1335	12-Aug	TU	1531	ARCH	775	6450	1.39	F					Grn	3085					
Rob Out	1335	12-Aug	TU	1532	ARCH	714	4285	1.18	F					Grn	3087					
Rob Out	1335	12-Aug	TU	1533	ARCH	624	2925	1.20	F					Grn	3088					
Rob Out	1335	12-Aug	TU	1534	ARCH	748	4770	1.14	F					Grn	3089					
Rob Out	1335	12-Aug	TU	1535	ARCH	756	4880	1.13	F					Grn	3090					
Rob Out	1335	12-Aug	TU	1536	ARCH	771	5115	1.12	M					Grn	3091					
Rob Out	1335	12-Aug	TU	1537	ARCH	805	6115	1.17	M					Grn	3092					
Rob Out	1335	12-Aug	TU	1538	ARCH	768	5015	1.11	M					Grn	3093					
Rob Out	1335	12-Aug	TU	1539	ARCH	585	2640	1.32						Grn	3262					
Rob Out	1335	12-Aug	TU	1540	ARCH	801	5165	1.01	F					Grn	3095					
Rob Out	1335	12-Aug	TU	1541	ARCH	641	3385	1.29	F					Grn	3096					
Rob Out	1335	12-Aug	TU	1542	ARCH	775	5590	1.20	F					Grn	3097					
Rob Out	1335	12-Aug	TU	1543	ARCH	585	2720	1.36	F					Grn	3098					
Rob Out	1335	12-Aug	TU	1544	ARCH	800	5795	1.13	M					Grn	3099					
Rob Out	1335	12-Aug	TU	1545	ARCH	732	4390	1.12	F					Grn	3101					
Rob Out	1335	12-Aug	TU	1546	ARCH	613	2905	1.26	F					Grn	3104					
Rob Out	1335	12-Aug	TU	1547	ARCH	640	3095	1.18	F					Grn	3106					
Rob Out	1335	12-Aug	TU	1548	ARCH	769	5060	1.11	F					Grn	3107					
Rob Out	1335	12-Aug	TU	1549	ARCH	673	3960	1.30	F					Grn	3108					
Rob Out	1335	12-Aug	TU	1550	ARCH	691	4125	1.25	F					Grn	3110					
Rob Out	1335	12-Aug	TU	1551	ARCH	735	4870	1.23	F					Grn	3112					
Rob Out	1335	12-Aug	TU	1552	ARCH	702	5100	1.47						Grn	3113					
Rob Out	1335	12-Aug	TU	1553	ARCH	640	3670	1.40	F					Grn	3115					
Rob Out	1335	12-Aug	TU	1554	ARCH	830	5550	0.97	M					Grn	3117					
Rob Out	1335	12-Aug	TU	1555	ARCH	798	5465	1.08	M					Grn	3119					
Rob Out	1335	12-Aug	TU	1556	ARCH	814	6150	1.14	M					Grn	3120					
Rob Out	1335	12-Aug	TU	1557	ARCH	709	4560	1.28	M					Grn	3121					
Rob Out	1335	12-Aug	TU	1558	ARCH	782	4980	1.04	M					Grn	3123					
Rob Out	1335	12-Aug	TU	1559	ARCH	875	7205	1.08	M					Grn	3126					
Rob Out	1335	12-Aug	TU	1560	ARCH	730	3900	1.00	F					Grn	3129					
Rob Out	1335	12-Aug	TU	1561	ARCH	731	4270	1.09	F					Grn	3130					
Rob Out	1335	12-Aug	TU	1562	ARCH	724	4040	1.06	F					Grn	3131					
Rob Out	1335	12-Aug	TU	1563	ARCH	785	4860	1.00	M					Grn	3132					
Rob Out	1335	12-Aug	TU	1564	ARCH	685	3375	1.05	F					Grn	3133					
Rob Out	1335	12-Aug	TU	1565	ARCH	638	3055	1.18	F					Grn	3134					
Rob Out	1335	12-Aug	TU	1566	ARCH	634	2950	1.16	F					Grn	3139					
Rob Out	1335	12-Aug	TU	1567	ARCH	667	3355	1.13	F					Grn	3140					
Rob Out	1335	12-Aug	TU	1568	ARCH	811	6815	1.28	F					Grn	3147					
Rob Out	1335	12-Aug	TU	1569	ARCH	720	3885	1.04	F					Grn	3148					
Rob Out	1335	12-Aug	TU	1570	ARCH	696	3930	1.17	F					Grn	3172					
Rob Out	1335	12-Aug	TU	1571	ARCH	638	2735	1.05	F					Grn	3151					
Rob Out	1335	12-Aug	TU	1572	ARCH	765	4950	1.11	F					Grn	3152					
Rob Out	1335	12-Aug	TU	1573	ARCH	585	2385	1.19	M					Grn	3153					
Rob Out	1335	12-Aug	TU	1574	ARCH	780	4860	1.02	F					Grn	3154					
Rob Out	1335	12-Aug	TU	1575	ARCH	721	4345	1.16	F					Grn	3155					
Rob Out	1335	12-Aug	TU	1576	ARCH	745	4380	1.06	M					Grn	3156					
Rob Out	1335	12-Aug	TU	1577	ARCH	678	3380	1.08	F					Grn	3157					
Rob Out	1335	12-Aug	TU	1578	ARCH	700	3425	1.00	F					Grn	3159					
Rob Out	1335	12-Aug	TU	1579	ARCH	707	3730	1.06	F					Grn	3160					
Rob Out	1335	12-Aug	TU	1580	ARCH	735	3670	0.92	F					Grn	3161					
Rob Out	1335																			

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	1230	13-Aug	TU		1634	ARCH	770	4590	1.01	F				Grn	3180					
Rob Out	1230	13-Aug	TU		1635	ARCH	753	5195	1.22	F				Grn	3181					
Rob Out	1230	13-Aug	TU		1636	ARCH	713	4065	1.12	F				Grn	3182					
Rob Out	1230	13-Aug	TU		1637	ARCH	561	2270	1.29	F				Grn	3183					
Rob Out	1230	13-Aug	TU		1640	ARCH	713	4175	1.15											
Rob Out	1000	14-Aug	TU		1739	ARCH	727	4535	1.18	F				Grn	3192					
Rob Out	1000	14-Aug	TU		1740	ARCH	843	6600	1.10	M				Grn	3193					
Rob Out	1000	14-Aug	TU		1741	ARCH	748	4260	1.02	F				Grn	3194					
Rob Out	1000	14-Aug	TU		1742	ARCH	742	5020	1.23	F				Grn	3195					
Rob Out	1330	14-Aug	TU		1760	ARCH	755	4485	1.04					Grn	3196					
Rob Out	1100	15-Aug	TU		1771	ARCH	690	3975	1.21	F				Grn	3199					
Rob Out	1100	15-Aug	TU		1772	ARCH	671	3810	1.26	F				Grn	3200					
Rob Out	1100	15-Aug	TU		1773	ARCH	817	6355	1.17	M				Grn	3201					
Rob Out	1100	15-Aug	TU		1774	ARCH	706	4455	1.27	F				Grn	3202					
Rob Out	1100	15-Aug	TU		1775	ARCH	677	3590	1.16	F				Grn	3203					
Rob Out	1100	15-Aug	TU		1776	ARCH	733	4855	1.23	F				Grn	3204					
Rob Out	1100	15-Aug	TU		1777	ARCH	882	6615	0.96	M				Grn	3205					
Rob Out	1300	15-Aug	TU		1779	ARCH	736	3855	0.97					Grn	3207					
Rob Out	1300	15-Aug	TU		1780	ARCH	782	5565	1.16					Wh	2511	02-1				
Rob Out	1135	16-Aug	TU		2018	ARCH	685	4205	1.31					Wh	2509	02-1				
Rob Out	1135	16-Aug	TU		2019	ARCH	709	4365	1.22	F				Grn	3208					
Rob Out	1135	16-Aug	TU		2020	ARCH	750	4290	1.02	F				Grn	3210					
Rob Out	1135	16-Aug	TU		2021	ARCH	767	5125	1.14	F				Grn	3211					
Rob Out	1135	16-Aug	TU		2022	ARCH	762	4935	1.12	F				Grn	3212					
Rob Out	1135	16-Aug	TU		2023	ARCH	664	3400	1.16	F				Grn	3213					
Rob Out	1135	16-Aug	TU		2024	ARCH	584	2235	1.12					Grn	3214					
Rob Out	1135	16-Aug	TU		2025	ARCH	747	5035	1.21	F				Grn	3215					
Rob Out	1135	16-Aug	TU		2026	ARCH	768	4665	1.03	F				Grn	3216					
Rob Out	1135	16-Aug	TU		2027	ARCH	851	6565	1.07	M				Grn	3218					
Rob Out	1135	16-Aug	TU		2028	ARCH	828	4895	0.86	M				Grn	3219					
Rob Out	1135	16-Aug	TU		2029	ARCH	740	5065	1.25	F				Grn	3220					
Rob Out	1135	16-Aug	TU		2030	ARCH	726	4420	1.16	F				Grn	3221					
Rob Out	1135	16-Aug	TU		2032	ARCH	688	3680	1.13	F				Grn	3224					
Rob Out	1135	16-Aug	TU		2033	ARCH	535	1705	1.11	F				Grn	3226					
Rob Out	1135	16-Aug	TU		2034	ARCH	838	6355	1.08	M				Grn	3227					
Rob Out	1135	16-Aug	TU		2035	ARCH	622	3195	1.33	F				Grn	3228					
Rob Out	1135	16-Aug	TU		2036	ARCH	696	3750	1.11	F				Grn	3229					
Rob Out	1135	16-Aug	TU		2039	ARCH	742	4750	1.16	F				Grn	3233					
Rob Out	1135	16-Aug	TU		2040	ARCH	753	5610	1.31	M				Grn	3234					
Rob Out	1135	16-Aug	TU		2041	ARCH	694	3615	1.08	F										
Rob Out	1930	17-Aug	TU		2075	ARCH	872	7290	1.10	M				Grn	3261					
Rob Out	1930	17-Aug	TU		2076	ARCH	735	4340	1.09	F				Grn	3242					
Rob Out	1930	17-Aug	TU		2077	ARCH	689	3580	1.09	F				Grn	3247					
Rob Out	1930	17-Aug	TU		2078	ARCH	677	3480	1.12	F				Grn	3250					
Rob Out	1930	17-Aug	TU		2079	ARCH	752	4985	1.17	M				Grn	3350					
Rob Out	1930	17-Aug	TU		2080	ARCH	712	4015	1.11	M				Grn	3351					
Rob Out	1930	17-Aug	TU		2081	ARCH	505	1220	0.95					Grn	3352					
Rob Out	1930	17-Aug	TU		2082	ARCH	701	3735	1.08	F				Grn	3353					
Rob Out	1930	17-Aug	TU		2083	ARCH	764	4925	1.10	M				Grn	3354					
Rob Out	1930	17-Aug	TU		2084	ARCH	479	1345	1.22					Grn	3355					
Rob Out	1930	17-Aug	TU		2085	ARCH	750	4920	1.17	M				Grn	3356					
Rob Out	1930	17-Aug	TU		2086	ARCH	722	4205	1.12	F				Grn	3357					
Rob Out	1237	18-Aug	TU		2101	ARCH	777	5060	1.08	F				Grn	3251					
Rob Out	1237	18-Aug	TU		2102	ARCH	654	3350	1.20	F				Grn	3252					
Rob Out	1237	18-Aug	TU		2103	ARCH	802	5260	1.02	M				Grn	3253					
Rob Out	1237	18-Aug	TU		2104	ARCH	863	6815	1.06	M				Grn	3256					
Rob Out	1237	18-Aug	TU		2105	ARCH	744	4805	1.17	F				Grn	3258					
Rob Out	1044	19-Aug	TU		2123	ARCH	438	885	1.05					Wh	2220	02-2				
Rob Out	1044	19-Aug	TU		2124	ARCH	530	1715	1.15					Wh	2325	02-1				
Rob Out	1044	19-Aug	TU		2125	ARCH	747	4735	1.14	F				Grn	3263					
Rob Out	1044	19-Aug	TU		2126	ARCH	726	5165	1.35	M				Grn	3264					
Rob Out	1044	19-Aug	TU		2127	ARCH	763	5045	1.14	M				Grn	3265					
Rob Out	1044	19-Aug	TU		2128	ARCH	757	5085	1.17	F				Grn	3266					
Rob Out	1044	19-Aug	TU		2129	ARCH	679	3520	1.12	F				Grn	3267					
Rob Out	1044	19-Aug	TU		2130	ARCH	728	4680	1.21	M				Grn	3268					
Rob Out	1044	19-Aug	TU		2132	ARCH	688	4095	1.26	F				Grn	3270					
Rob Out	910	20-Aug	TU		2380	ARCH	754	4765	1.11	M				Grn	3271					
Rob Out	910	20-Aug	TU		2381	ARCH	736	4640	1.16	M				Grn	3272					
Rob Out	910	20-Aug	TU		2382	ARCH	745	4235	1.02	M				Grn	3273					
Rob Out	910	20-Aug	TU		2383	ARCH	736	4015	1.01	M				Grn	3274					
Rob Out	910	20-Aug	TU		2384	ARCH	730	4415	1.13	F				Grn	3275					
Rob Out	910	20-Aug	TU		2385	ARCH	503	1435	1.13					Grn	3276					
Rob Out	910	20-Aug	TU		2386	ARCH	643	3335	1.25	F				Grn	3277					
Rob Out	910	20-Aug	TU		2387	ARCH	467	1135	1.11					Grn	3278					
Rob Out	910	20-Aug	TU		2388	ARCH	728	3740	0.97	F				Grn	3279					
Rob Out	910	20-Aug	TU		2389	ARCH	331	420	1.16					Grn	3280					
Rob Out	910	20-Aug	TU		2390	ARCH	603	3160	1.44	F				Grn	3281					
Rob Out	910	20-Aug	TU		2391	ARCH	749	4510	1.07	M				Grn	3282					
Rob Out	910	20-Aug	TU		2392	ARCH	510	1750	1.32					Grn	3283					
Rob Out	910	20-Aug	TU		2393	ARCH	650	3500												

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Out	925	21-Aug	TU		2445	ARCH	728	4085	1.06	M			Grn	3305						Very orange in colour
Rob Out	925	21-Aug	TU		2447	ARCH	482	1315	1.17	M			Grn	3307						
Rob Out	925	21-Aug	TU		2449	ARCH	597	2515	1.18	F			Grn	3309						
Rob Out	920	22-Aug	TU		2475	ARCH	465	1205	1.20				Wh	2223	02-2					Tagged 26 Aug 02 in RO FL=433 Wt=850
Rob Out	920	22-Aug	TU		2476	ARCH	893	7045	0.99	M			Grn	3314						
Rob Out	920	22-Aug	TU		2477	ARCH	730	4220	1.08	F			Grn	3317						
Rob Out	920	22-Aug	TU		2478	ARCH	724	4355	1.15	F			Grn	3318						
Rob Out	920	22-Aug	TU		2479	ARCH	787	5155	1.06	M			Grn	3321						
Rob Out	920	22-Aug	TU		2480	ARCH	646	2530	0.94	F			Grn	3322						
Rob Out	920	22-Aug	TU		2481	ARCH	611	2665	1.17	M			Grn	3323						
Rob Out	940	23-Aug	TU		2753	ARCH	797	4475	0.88	M			Grn	3325						
Rob Out	940	23-Aug	TU		2754	ARCH	715	3500	0.96	F			Grn	3326						
Rob Out	940	23-Aug	TU		2755	ARCH	735	5090	1.28	F			Grn	3339						
Rob Out	940	23-Aug	TU		2756	ARCH	615	3115	1.34	F			Grn	3328						
Rob Out	940	23-Aug	TU		2757	ARCH	705	3760	1.07	F			Grn	3329						
Rob Out	940	23-Aug	TU		2758	ARCH	721	5060	1.35	M			Grn	3330						
Rob Out	940	23-Aug	TU		2759	ARCH	720	4175	1.12	F			Grn	3340						
Rob Out	1114	24-Aug	TU		2774	ARCH	584	2215	1.11	F			Wh	2268	02-2					
Rob Out	1114	24-Aug	TU		2775	ARCH	617	2990	1.27	F			Grn	3341						
Rob Out	1114	24-Aug	TU		2776	ARCH	671	3645	1.21	M			Grn	3342						
Rob Out	1114	24-Aug	TU		2777	ARCH	763	5320	1.20	M			Grn	3343						
Rob Out	1114	24-Aug	TU		2778	ARCH	798	5590	1.10	M			Grn	3344						
Rob Out	1114	24-Aug	TU		2779	ARCH	545	1710	1.06				Grn	3346						
Rob Out	1114	24-Aug	TU		2780	ARCH	458	1065	1.11				Grn	3347						
Rob Out	1114	24-Aug	TU		2781	ARCH	562	2110	1.19				Grn	3349						
Rob Out	1114	24-Aug	TU		2782	ARCH	476	1060	0.98				Grn	3359						
Rob Out	1114	24-Aug	TU		2783	ARCH	485	1285	1.13				Grn	3360						
Rob Out	1114	24-Aug	TU		2785	ARCH	386	665	1.16				Grn	3362						
Rob Out	1114	24-Aug	TU		2786	ARCH	545	1815	1.12	F			Grn	3363						
Rob Out	1114	24-Aug	TU		2787	ARCH	612	2540	1.11	M			Grn	3364						
Rob Out	1114	24-Aug	TU		2788	ARCH	649	2930	1.07	F			Grn	3365						
Rob Out	1114	24-Aug	TU		2789	ARCH	382	600	1.08				Grn	3366						
Rob Out	1114	24-Aug	TU		2790	ARCH	317	425	1.33				Grn	3367						
Rob Out	1114	24-Aug	TU		2791	ARCH	576	2245	1.17	M			Grn	3368						
Rob Out	940	25-Aug	TU		2806	ARCH	856	5580	0.89	M			Grn	3371						
Rob Out	940	25-Aug	TU		2807	ARCH	757	5495	1.27	F			Grn	3372						
Rob Out	940	25-Aug	TU		2808	ARCH	666	3600	1.22	M			Grn	3373						
Rob Out	940	25-Aug	TU		2809	ARCH	623	2675	1.11	F			Grn	3374						
Rob Out	940	25-Aug	TU		2810	ARCH	391	695	1.16				Grn	3375						
Rob Out	940	25-Aug	TU		2811	ARCH	637	2745	1.06	M			Grn	3376						
Rob Out	940	25-Aug	TU		2812	ARCH	442	990	1.15				Grn	3377						
Rob Out	940	25-Aug	TU		2813	ARCH	766	4700	1.05	M			Grn	3378						
Rob Out	940	25-Aug	TU		2814	ARCH	727	4030	1.05	F			Grn	3379						
Rob Out	940	25-Aug	TU		2815	ARCH	642	2985	1.13				Grn	3380						
Rob Out	940	25-Aug	TU		2816	ARCH	342	425	1.06				Grn	3381						
Rob Out	940	25-Aug	TU		2818	ARCH	481	1350	1.21				Grn	3383						
Rob Out	940	25-Aug	TU		2820	ARCH	290	255	1.05				Grn	3387						
Rob Out	1021	26-Aug	TU		2826	ARCH	365	620	1.28				Grn	3388						
Rob Out	1021	26-Aug	TU		2827	ARCH	432	1020	1.27				Grn	3389						
Rob Out	1021	26-Aug	TU		2828	ARCH	449	1015	1.12				Grn	3389						
Rob Out	1021	26-Aug	TU		2829	ARCH	385	735	1.29				Grn	3390						
Rob Out	1021	26-Aug	TU		2830	ARCH	758	4260	0.98				Grn	3391						
Rob Out	1021	26-Aug	TU		2831	ARCH	585	2450	1.22	F			Grn	3392						
Rob Out	1021	26-Aug	TU		2832	ARCH	271	210	1.06				Grn	3393						
Rob Out	1021	26-Aug	TU		2833	ARCH	271	210	1.06				Grn	3394						
Rob Out	1021	26-Aug	TU		2834	ARCH	305	305	1.07				Grn	3395						
Rob Out	951	27-Aug	TU		3225	ARCH	715	3180	0.87				Grn	3396						
Rob Out	951	27-Aug	TU		3226	ARCH	430	805	1.01				Grn	3397						
Rob Out	951	27-Aug	TU		3228	ARCH	291	290	1.18				Grn	3398						
Rob Out	940	28-Aug	TU		3466	ARCH	794	5340	1.07				Grn	3399						
Rob Out	940	28-Aug	TU		3467	ARCH	453	930	1.00				Grn	3400						
Rob Out	940	28-Aug	TU		3468	ARCH	751	3290	0.78				Grn	3401						
Rob Out	940	28-Aug	TU		3469	ARCH	348	510	1.21				Grn	3402						
Rob Out	940	28-Aug	TU		3470	ARCH	411	805	1.16				Grn	3403						
Rob Out	940	28-Aug	TU		3471	ARCH	425	860	1.12				Grn	3404						
Rob Out	940	28-Aug	TU		3472	ARCH	450	1050	1.15				Grn	3405						
Rob Out	940	28-Aug	TU		3473	ARCH	312	360	1.19				Grn	3406						
Rob Out	940	28-Aug	TU		3474	ARCH	373	555	1.07				Grn	3407						
Rob Out	940	28-Aug	TU		3475	ARCH	327	360	1.03				Grn	3408						
Rob Out	940	28-Aug	TU		3476	ARCH	411	860	1.24				Grn	3409						
Rob Out	935	29-Aug	TU		3515	ARCH	821	6580	1.19				Grn	3410						
Rob Out	935	29-Aug	TU		3516	ARCH	412	850	1.22				Grn	3411						
Rob Out	935	29-Aug	TU		3517	ARCH	343	500	1.24				Grn	3412						
Rob Out	935	29-Aug	TU		3518	ARCH	475	1240	1.16				Grn	3413						
Rob Out	935	29-Aug	TU		3519	ARCH	340	425	1.08				Grn	3414						
Rob Out	935	29-Aug	TU		3520	ARCH	271	205	1.03				Grn	3415						
Rob Out	941	30-Aug	TU		3672	ARCH	674	2940	0.96	F			Grn	3420						
Rob Out	941	30-Aug	TU		3673	ARCH	680	3640	1.16	F			Grn	3421						
Rob Out	941	30-Aug	TU		3674	ARCH	825	6430	1.15	M			Grn	3422						
Rob Out	941	30-Aug	TU		3675	ARCH														

#### Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Appendix D1. Data for individual fish captured in the Doris North Project area, 2003.

Waterbody	Site / Time	Date	Samp. Meth.	Mesh (cm)	Sample #	Species	FL (mm)	Weight (g)	Cond. Fact.	Sex	Mat.	Rep. Stat.	Tag Color	Tag #	Re-capt.	Mortality	Stomach		Comments	
																	% Full	Contents		
Rob Trib	E09a	6-Sep	EF		3963	LKTR	128													
Rob Trib	E09a	6-Sep	EF		3964	LKTR	121													
Rob Trib	E09a	6-Sep	EF		3965	LKTR	81													
Rob Trib	E09a	6-Sep	EF		3966	LKTR	93													
Rob Trib	E09a	6-Sep	EF		3967	LKTR	64													
Rob Trib	E14a	2-Sep	EF		3834	NNST	61													
Rob Trib	E14a	2-Sep	EF		3835	NNST	45													
Rob Trib	E14a	2-Sep	EF		3836	NNST	59													
Rob Trib	E14a	2-Sep	EF		3837	NNST	59													
Rob Trib	E14a	2-Sep	EF		3838	NNST	55													
Rob Trib	E14d	5-Sep	EF		3915	NNST	36													
Rob Trib	E14c	5-Sep	EF		3916	NNST	52													
Rob Trib	E14c	5-Sep	EF		3917	NNST	58													
Rob Trib	E14c	5-Sep	EF		3918	NNST	59													
Rob Trib	E14c	5-Sep	EF		3919	NNST	50													
Rob Trib	E14c	5-Sep	EF		3920	NNST	54													
Rob Trib	E14c	5-Sep	EF		3921	NNST	63													
Rob Trib	E14c	5-Sep	EF		3922	NNST	40													
Rob Trib	E14c	5-Sep	EF		3923	NNST	60													
Rob Trib	E14c	5-Sep	EF		3924	NNST	64													
Rob Trib	E14c	5-Sep	EF		3925	NNST	67													
Rob Trib	E14c	5-Sep	EF		3926	NNST	51													
Tail Out	E24	6-Aug	EF		1357	NNST	81													
Tail Out	E24	6-Aug	EF		1358	NNST	70													
Tail Out	E24	6-Aug	EF		1359	NNST	66													
Tail Out	E24	6-Aug	EF		1360	NNST	63													
Tail Out	E24	6-Aug	EF		1361	NNST	61													
Tail Out	E24	6-Aug	EF		1362	NNST	61													
Tail Out	E24	6-Aug	EF		1363	NNST	58													
Tail Out	E24	6-Aug	EF		1364	NNST	58													
Tail Out	E24	6-Aug	EF		1365	NNST	52													
Tail Out	E24	6-Aug	EF		1366	NNST	44													
Windy Out	E28	5-Sep	EF		3930	NNST	19													
Windy Out	E28	5-Sep	EF		3931	NNST	22													
Windy Out	E28	5-Sep	EF		3932	NNST	21													
Windy Out	E28	5-Sep	EF		3933	NNST	19													
Windy Out	E28	5-Sep	EF		3934	NNST	18													

**CODES:**

<b>Method:</b>	BS Beach Seine	<b>Sex:</b>	F Female	<b>Recapture:</b>	00-1 1st recapture of fish marked in Aug 2000
DN	Dip Net	M	Male	00-2	2nd recapture of fish marked in Aug 2000
EF	Backpack Electrofishing			02-1	1st recapture of fish marked in Aug 2002
FN	Fyke Net			02-2	2nd recapture of fish marked in Aug 2002
GN	Gill Net			02-3	3rd recapture of fish marked in Aug 2002
TU	Trap/Fence			03-1	1st recapture of fish marked in Aug 2003
				03-2	2nd recapture of fish marked in Aug 2003
				03-3	3rd recapture of fish marked in Aug 2003
<b>Species:</b>	ARCH Arctic char	<b>Maturity:</b>	1 Immature		
ARFL	Arctic flounder		2 Mature		
BRWH	Broad whitefish				
CAPE	Capelin	<b>Reproductive Status:</b>	1 Undeveloped		
CISC	Cisco		2 Gravid		
FRSC	Fourhorn sculpin		3 Ripe		
GRCD	Greenland cod	<b>Condition Factor</b>	= Weight [in g] X 10 <sup>5</sup> / (FL [in mm]) <sup>3</sup>	<b>Mortality:</b>	Mort Fish that died during sampling
LHDB	Longhead dab				
LKTR	Lake trout				
LKWH	Lake whitefish				
LSCS	Least cisco				
NNST	Ninespine stickleback				
PCHR	Pacific herring	<b>Tag Colour:</b>	Blu Blue	<b>Stomach Content:</b>	Amph Amphipoda
SFCD	Saffron cod		Grn Green		CAPE Capelin
			Wh White		Chir Chironomidae (blood worms)
					Isop Isopoda ( <i>Saduria entemona</i> )
					Unid Unidentified
		<b>FL:</b>	Fork length (in mm)		
		<b>Mesh:</b>	VM Variable mesh sizes (3.8, 5.1, 6.4, 7.6, 8.9 & 10.2 cm)		
		<b>Tag:</b>	Color		
			Size		

Appendix D2. Location, effort, catch, and CPUE data for fyke net sets in the Doris North Project area, 2003

Water-body	Set No.	UTM Location (Zone 13W)	Set Date	Set Time	Water Temp (°C)	Set Period (h)	Number Captured / CPUE (fish/24 h)																										
							Arctic char		Lake trout		Lake whitefish		Cisco		Least cisco		Ninespine stickleback		Arctic flounder		Saffron cod		Greenland cod		Capelin		Fourhorn sculpin		Longhead dab		All Species		
							n	CPUE	n	(r)	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE						
Roberts Bay (west basin)	F1-E <sup>a</sup>	432552 7563287	23-Jul	15:45	10.5	21.8	1	1.10	2	2.21							2	3.43	8	8.83	2609	2878.90					2620	2891.03					
			27-Jul	20:30	12.0	14.0			2	3.43							1	1.71	18	30.86							23	39.43					
			10-Aug	18:15	11.0	18.5			2	2.59							1	1.07	30	38.92							33	42.81					
			11-Aug	12:45	8.0	22.5			2	(1)	2.13						1	0.88	8	7.05	24	21.14							14	(1)	14.93		
			12-Aug	11:15	8.5	27.2	1	0.88	1	0.88							1	1.00	1	1.00	57	56.80							36	31.71			
			25-Aug	12:30		24.1											1	1.05	167	174.89							60	59.79					
			26-Aug	12:35	8.8	22.9												113	122.35							168	175.94						
			28-Aug	15:50	9.3	22.2														1	1.08						114	123.43					
	Total						173.2	3	9			3	2				13	410			2627	1						3068	(1)				
	Mean CPUE								0.42		1.25						0.42	0.28			364.09	0.14						425.21					
	Standard Deviation								0.52		1.36						0.57	0.44			1016.34	0.38						998.94					
F1-W <sup>a</sup>	432552 7563287		23-Jul	15:45	10.5	21.8	1	1.10	3	3.31							2	2.21	117	129.10						1	1.10	124	136.83				
			27-Jul	20:30	12.0	14.0	1	1.71	1	1.71							3	5.14	7	12.00							12	20.57					
			10-Aug	18:15	11.0	18.5	4	5.19									6	7.78	17	22.05							28	36.32					
			11-Aug	12:45	8.0	22.5											9	7.93	49	43.16							1	1.07					
			12-Aug	11:15	8.5	27.2			1	0.88							314	312.91							62	54.61							
			25-Aug	12:30		24.1											59	61.79							314	312.91							
			26-Aug	12:35	8.8	22.9											1	1.08	6	6.50						59	61.79						
			28-Aug	15:50	9.3	22.2																			7	7.58							
	Total						173.2	6	5			1					21	569	1				3	1			607						
	Mean CPUE								0.83		0.69						0.14				78.86	0.14						84.13					
	Standard Deviation								1.82		1.21						0.46				105.42	0.38						103.76					
	Total for F1-E and F1-W combined						346.3	9	0.62		0.97						4	0.28	2	0.14		34	2.36	67.84	1	0.07	2627	4	0.28	1	0.07	3675	254.67
Roberts Bay (east basin)	F2-E <sup>a</sup>	433558 7563558	14-Aug	18:50	13.4	19.2										1	1.25			20	25.04	50	62.61						2	2.50		73	91.41
			18-Aug	18:20	9.3	17.7											7	9.51	140	190.19							1	1.36		148	201.06		
			21-Aug	17:00	5.4	17.3											26	35.97	165	228.24							1	1.38		192	265.59		
	Total						54.2									1				53	355						4			413			
	Mean CPUE															0.44				23.48	157.24							1.77		182.93			
	Standard Deviation															0.72				13.29	86.76							0.65		88.06			
	F2-W <sup>a</sup>	433558 7563558	14-Aug	18:50	13.4	19.2													7	8.77	134	167.79							141	176.56			
			18-Aug	18:20	9.3	17.7											5	6.79	79	107.32							84	114.11					
			21-Aug	17:00	5.4	17.3											4	5.53	57	78.85							62	85.76					
	Total						54.2												16	270						1			287				
	Mean CPUE																		7.09	119.59							0.44		127.12				
	Standard Deviation																1.63	45.42								0.80		46.45					
	Total for F2-E and F2-W combined						108.4									1	0.22			69	625						5	1.11		700	155.03		
Little Roberts Lake	F3	434669 7562499	5-Sep	16:00	9	19.5										4	4.92										4	4.92					
			6-Sep	11:30	9	23.3										1	1.04										3	3.12					
			7-Sep	10:45	8.5	28.3										5	4.03									7	5.65						
			31-Aug	11:30	10.0	23.1	1	1.04	1	1.04						2	2.06									3	3.09						
	F4	435275 7562570	1-Sep	10:35	10.0	29.8	2	1.61	1	1.03						2	2.04									2	2.04						
			2-Sep	16:20	12.0	23.3										6	6.08									7	7.10						
			3-Sep	15:40	10.0	23.5										20											26						
			4-Sep	15:10	10.0	23.7	1	1.01								0.49	0.25	0.48		2.47	2.27							3.21					
	Total						194.3	4	2								0.66											2.56					

Appendix D2. Location, effort, catch, and CPUE data for fyke net sets in the Doris North Project area, 2003

Water-body	Set No.	UTM Location (Zone 13W)	Set Date	Set Time	Water Temp (°C)	Set Period (h)	Number Captured / CPUE (fish/24 h)																																						
							Arctic char		Lake trout		Lake whitefish		Cisco		Least cisco		Ninespine stickleback		Arctic flounder		Saffron cod		Greenland cod		Capelin		Fourhorn sculpin		Longhead dab		All Species														
							n	CPUE	n	(r)	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE	n	CPUE																		
Roberts Lake	F6	435239 7562384	27-Aug	15:00		19.5	3	1	1.01						1	1.23								1	1.23																				
			28-Aug	10:32		23.7																																							
			29-Aug	10:11		24.6																																							
			30-Aug	10:45		23.8																																							
	Total				91.6		3	1								1										5																			
	Mean CPUE							0.79		0.26						0.26								1.31																					
	Standard Deviation							0.92		0.46						1.86								1.22																					
	Doris Lake	F7	434126 7558959	9-Aug	14:45	10.0	19.4									1	0.34								1	0.34																			
				10-Aug	10:10	10.0	71.3																																						
				13-Aug	9:30	10.0	72.8																																						
				16-Aug	10:15	10.0	53.3																																						
				23-Jul	17:00	11.0	48.0																																						
	F8	435225 7562350		25-Jul	17:00	12.0	16.5																																						
				26-Jul	9:30	12.0	48.0																																						
				28-Jul	9:30	9.5	24.2																																						
	F9	434870 7555650		18-Aug	16:34	47.6	72.6																																						
				20-Aug	16:10																																								
	F10	434819 7555653		22-Aug	16:30	10.6	22.8																																						
				23-Aug	15:20																																								
	F11	434779 7555478		24-Aug	14:20																																								
Total				591.1			2	1		0.08		0.04		0.39		0.09		5		0.20		0.89		8																					
Mean CPUE																								0.32																					
Standard Deviation																								1.18																					

<sup>a</sup> E denotes the east bound net; W denotes the west bound.

NOTES:

n = number of captured fish (includes recaptures)

(r) = number of recaptured fish (tagged previous year)

CPUE = catch per unit effort (fish/24 h); includes recaptures fish

Appendix D3. Location, effort, and catch data for gill net sets in Doris North Project lakes, 2003.

Lake	Set No.	UTM Location		Water Depth (m)	Water Temp. (°C)	Pull		Set Period (h)	Net Area (m <sup>2</sup> )	No. Panels	Net Units <sup>a</sup>	Mesh Sizes (cm) <sup>b</sup>	Number of Fish Captured										
		Zone 13W	Easting Northing			Date	Time						Arctic char	Lake trout	Lake whitefish	Cisco	Least cisco	Arctic flounder	Saffron cod	Greenland cod	Fourhorn sculpin	Pacific herring	All Species
Roberts Bay	G1	433560	7564046	1.0-3.7	7.5	21-Aug	15:47	2.3	108	6	0.10	VM	3					1	3	2	1	2	4
	G2	433125	7563809	2.1		28-Aug	13:35	24.2	27	1	0.27	8.9	1				1	3		1	2	7	
	G2	433125	7563809	2.1		29-Aug	12:30	22.9	27	1	0.26	8.9	3					3				10	
	G3	433138	7563775	1.0-2.7	7.5	21-Aug	15:30	2.8	108	6	0.12	VM	2									3	
	G4	432817	7563787	1.2-3.9		23-Aug	15:00	2.0	108	6	0.09	VM										0	
	G5	432719	7563587	1.6		28-Aug	13:45	24.5	13.5	1	0.14	8.9										5	
	G5	432719	7563587	1.6		29-Aug	12:10	22.4	13.5	1	0.13	8.9	1									2	
	G6	432607	7563007	1.2-2.0	3.8	25-Aug	17:00	3.4	108	6	0.15	VM										1	
	G7	432879	7563359	1.1-1.25	5.4	22-Aug	15:30	3.4	108	6	0.15	VM	1									1	
	G8	432747	7563154	0.5-3.7	5.4	22-Aug	15:45	3.0	108	6	0.14	VM										2	
	G9	432663	7563345	0.6-4.4	10.5	25-Jul	10:30	21.3	108	6	0.96	VM	3				7	100			3	114	
Little Roberts Lake	G10	432178	7563352	1.3-3.6		26-Aug	16:40	1.3	108	6	0.06	VM										0	
	G11	432309	7563208	2.0-3.7	5.0	25-Aug	17:20	3.3	108	6	0.15	VM	1									1	
	G12	432066	756627	1.1-3.7		26-Aug	16:55	1.3	108	6	0.06	VM	1									1	
	Total						138.1						16	0.000	0	2	0	9	111	2	5	6	151
	G13	434835	7562689	0.8		28-Aug	11:05	19.3	27	1	0.22	1.9				2							0
	G13	434835	7562689	0.8		29-Aug	10:41	23.6	27	1	0.27	1.9				2							4
	G13	434835	7562689	0.8		30-Aug	10:30	23.8	27	1	0.27	1.9										0	
	G13	434835	7562689	0.8		31-Aug	9:40	23.2	27	1	0.26	1.9										0	
	G13	434835	7562689	0.8	10.0	1-Sep	10:30	24.8	27	1	0.28	1.9										0	
	G13	434835	7562689	0.8	12.0	2-Sep	16:15	29.8	27	1	0.33	1.9										1	
	G13	434835	7562689	0.8	10.0	3-Sep	15:35	23.3	27	1	0.26	1.9				1						1	
	G13	434835	7562689	0.8	10.0	4-Sep	15:05	23.5	27	1	0.26	1.9										0	
	G13	434835	7562689	0.8	10.0	5-Sep	14:50	23.8	27	1	0.27	1.9	1									1	
	G14	434687	7562753	1.0	10.0	1-Sep	11:00	23.4	27	1	0.26	1.9										0	
	G14	434687	7562753	1.0	10.0	2-Sep	16:35	29.6	27	1	0.33	1.9	1									1	
	G14	434687	7562753	1.0	10.0	3-Sep	15:45	23.2	27	1	0.26	1.9				1						0	
	G14	434687	7562753	1.0	10.0	4-Sep	15:20	23.6	27	1	0.27	1.9										0	
	G14	434687	7562753	1.0	10.0	5-Sep	15:05	23.7	27	1	0.27	1.9										0	
	G15	434606	7562476	1.3	9.0	6-Sep	11:15	19.9	27	1	0.22	1.9	1									1	
	G15	434606	7562476	1.3	9.0	7-Sep	10:30	23.3	27	1	0.26	1.9				2						2	
	G15	434606	7562476	1.3	8.5	8-Sep	14:40	28.2	27	1	0.32	1.9										0	
	G16	434812	7562451	1.0	9.0	6-Sep	11:20	19.6	27	1	0.22	1.9										0	
	G16	434812	7562451	1.0	9.0	7-Sep	10:40	23.3	27	1	0.26	1.9										0	
	G16	434812	7562451	1.0	8.5	8-Sep	14:50	28.2	27	1	0.32	1.9										0	
	Total						480.9						3	4	0	1	3	0	0	0	0	11	
Roberts Lake	G17	435261	7562236	1.2		28-Aug	10:40	19.5	27	1	0.22	1.9				1						1	
	G17	435261	7562236	1.2		29-Aug	10:19	23.6	27	1	0.27	1.9	1									1	
	G17	435261	7562236	1.2		30-Aug	11:00	24.7	27	1	0.28	1.9										0	
	G17	435261	7562236	1.2		31-Aug	10:38	23.6	27	1	0.27	1.9										0	
Doris Lake	Total						91.5						1	1	0	0	0	0	0	0	0	2	
	G18	433575	7558450	0-1.3	12.0	28-Jul	9:20	47.1	27	1	0.53	1.9				1						1	
	G19	434774	7555537	1		23-Aug	15:30	22.8	27	1	0.26	1.9				1						3	
	G20	434802	7555497	1.3		24-Aug	15:15	23.0	27	1	0.26	1.9				1						1	
	G20	434802	7555497	1.3		27-Aug	14:30	71.3	27	1	0.80	1.9										1	
	Total						164.1						0	2	3	0	1	0	0	0	0	6	

Appendix D3. Location, effort, and catch data for gill net sets in Doris North Project lakes, 2003.

Lake	Set No.	UTM Location		Water Depth (m)	Water Temp. (°C)	Pull		Set Period (h)	Net Area (m <sup>2</sup> )	No. Panels	Net Units <sup>a</sup>	Mesh Sizes (cm) <sup>b</sup>	CPUE (Number of Fish /100 m <sup>2</sup> /24 h)										
		Zone 13W	Easting Northing			Date	Time						Arctic char	Lake trout	Lake whitefish	Cisco	Least cisco	Arctic flounder	Saffron cod	Greenland cod	Fourhorn sculpin	Pacific herring	All Species
Roberts Bay	G1	433560	7564046	1.0-3.7	7.5	21-Aug	15:47	2.3	108	6	0.10	VM	0.31					0.27	0.82	0.54	0.10	0.41	
	G2	433125	7563809	2.1		28-Aug	13:35	24.2	27	1	0.27	8.9	0.27					0.26	0.77		0.26	1.91	
	G2	433125	7563809	2.1		29-Aug	12:30	22.9	27	1	0.26	8.9	0.77									2.58	
	G3	433138	7563775	1.0-2.7	7.5	21-Aug	15:30	2.8	108	6	0.12	VM	0.25								0.12	0.37	
	G4	432817	7563787	1.2-3.9		23-Aug	15:00	2.0	108	6	0.09	VM										0.00	
	G5	432719	7563587	1.6		28-Aug	13:45	24.5	13.5	1	0.14	8.9										0.69	
	G5	432719	7563587	1.6		29-Aug	12:10	22.4	13.5	1	0.13	8.9	0.13									0.25	
	G6	432607	7563007	1.2-2.0	3.8	25-Aug	17:00	3.4	108	6	0.15	VM										0.15	
	G7	432879	7563359	1.1-1.25	5.4	22-Aug	15:30	3.4	108	6	0.15	VM	0.15									0.15	
	G8	432747	7563154	0.5-3.7	5.4	22-Aug	15:45	3.0	108	6	0.14	VM										0.27	
	G9	432663	7563345	0.6-4.4	10.5	25-Jul	10:30	21.3	108	6	0.96	VM	2.88					6.71	95.92		2.88	109.35	
Little Roberts Lake	G10	432178	7563352	1.3-3.6		26-Aug	16:40	1.3	108	6	0.06	VM										0.00	
	G11	432309	7563208	2.0-3.7	5.0	25-Aug	17:20	3.3	108	6	0.15	VM	0.15									0.15	
	G12	432066	756627	1.1-3.7		26-Aug	16:55	1.3	108	6	0.06	VM	0.06									0.06	
	<b>Total</b>							<b>138.1</b>					<b>4.97</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>	<b>0.00</b>	<b>7.24</b>	<b>98.20</b>	<b>0.54</b>	<b>3.24</b>	<b>1.87</b>	<b>116.35</b>
	G13	434835	7562689	0.8		28-Aug	11:05	19.3	27	1	0.22	1.9											0.00
	G13	434835	7562689	0.8		29-Aug	10:41	23.6	27	1	0.27	1.9										1.06	
	G13	434835	7562689	0.8		30-Aug	10:30	23.8	27	1	0.27	1.9										0.00	
	G13	434835	7562689	0.8		31-Aug	9:40	23.2	27	1	0.26	1.9										0.00	
	G13	434835	7562689	0.8	10.0	1-Sep	10:30	24.8	27	1	0.28	1.9										0.00	
	G13	434835	7562689	0.8	12.0	2-Sep	16:15	29.8	27	1	0.33	1.9										0.33	
	G13	434835	7562689	0.8	10.0	3-Sep	15:35	23.3	27	1	0.26	1.9										0.26	
	G13	434835	7562689	0.8	10.0	4-Sep	15:05	23.5	27	1	0.26	1.9										0.00	
	G13	434835	7562689	0.8	10.0	5-Sep	14:50	23.8	27	1	0.27	1.9	0.27									0.27	
	G14	434687	7562753	1.0	10.0	1-Sep	11:00	23.4	27	1	0.26	1.9										0.00	
	G14	434687	7562753	1.0	10.0	2-Sep	16:35	29.6	27	1	0.33	1.9	0.33									0.33	
	G14	434687	7562753	1.0	10.0	3-Sep	15:45	23.2	27	1	0.26	1.9										0.00	
	G14	434687	7562753	1.0	10.0	4-Sep	15:20	23.6	27	1	0.27	1.9										0.00	
	G14	434687	7562753	1.0	10.0	5-Sep	15:05	23.7	27	1	0.27	1.9										0.00	
	G15	434606	7562476	1.3	9.0	6-Sep	11:15	19.9	27	1	0.22	1.9	0.22									0.22	
	G15	434606	7562476	1.3	9.0	7-Sep	10:30	23.3	27	1	0.26	1.9										0.52	
	G15	434606	7562476	1.3	8.5	8-Sep	14:40	28.2	27	1	0.32	1.9										0.00	
	G16	434812	7562451	1.0	9.0	6-Sep	11:20	19.6	27	1	0.22	1.9										0.00	
	G16	434812	7562451	1.0	9.0	7-Sep	10:40	23.3	27	1	0.26	1.9										0.00	
	G16	434812	7562451	1.0	8.5	8-Sep	14:50	28.2	27	1	0.32	1.9										0.00	
	<b>Total</b>							<b>480.9</b>					<b>0.82</b>	<b>1.05</b>	<b>0.00</b>	<b>0.26</b>	<b>0.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.01</b>	
Roberts Lake	G17	435261	7562236	1.2		28-Aug	10:40	19.5	27	1	0.22	1.9										0.22	
	G17	435261	7562236	1.2		29-Aug	10:19	23.6	27	1	0.27	1.9	0.27									0.27	
	G17	435261	7562236	1.2		30-Aug	11:00	24.7	27	1	0.28	1.9										0.00	
	G17	435261	7562236	1.2		31-Aug	10:38	23.6	27	1	0.27	1.9										0.00	
	<b>Total</b>							<b>91.5</b>					<b>0.27</b>	<b>0.22</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.49</b>	
Doris Lake	G18	433575	7558450	0-1.3	12.0	28-Jul	9:20	47.1	27	1	0.53	1.9										0.53	
	G19	434774	7555537	1		23-Aug	15:30	22.8	27	1	0.26	1.9										0.77	
	G20	434802	7555497	1.3		24-Aug	15:15	23.0	27	1	0.26	1.9										0.26	
	G20	434802	7555497	1.3		27-Aug	14:30	71.3	27	1	0.80	1.9										0.80	
	<b>Total</b>							<b>164.1</b>					<b>0.00</b>	<b>0.51</b>	<b>1.04</b>	<b>0.00</b>	<b>0.80</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.36</b>	

<sup>a</sup> one net unit equals 100 m<sup>2</sup> of net set for 24 hours

<sup>b</sup> Six panel variable mesh gill nets (VM) included sizes 3.8, 5.1, 6.4, 7.6, 8.9, and 10.2 cm stretched mesh.

Appendix D4. Backpack electrofishing sampling locations, effort, habitat, fish catches and catch-per-unit-effort (CPUE) in Doris North Project lakes, September 2003.

Site	Date	Time	UTM (13W) Easting Northing	Effort		Sub- strate <sup>a</sup>	Habitat Type	Max. Depth (m)	Co- ver <sup>b</sup>	Number of Fish Captured <sup>c</sup>						CPUE (Number of Fish / 100 s)										
				(m)	(s)					ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	
Doris L.	E18	7-Sep 15:20	475460 6292509	100	484	sa/si/bo	shoreline	1.00	bo																	
Doris L.	E19	7-Sep 14:15	475460 6292509	100	574	sa/bo	shoreline	1.00	bo									3	3					0.52	<b>0.52</b>	
Doris L.	E20	7-Sep 14:00	433536 7558712	75	540	bo/sa	shoreline	1.00	bo									1	1					0.19	<b>0.19</b>	
Doris L.	E21	7-Sep 13:00	434129 7559047	200	469	sa/bo	shoreline	1.00	veg		1							1	2		0.21			0.21	<b>0.43</b>	
Doris L.	E22	7-Sep 12:20	476243 6290731	400	1170	sa/gr/co	shoreline	1.00	veg									6	6					0.51	<b>0.51</b>	
<b>Subtotal</b>				<b>875</b>	<b>3237</b>						<b>1</b>						<b>11</b>	<b>12</b>		<b>0.03</b>				<b>0.34</b>	<b>0.37</b>	
Roberts L.	E08	6-Sep 15:50	438534 7561328	30	300	co/bo	shoreline	1	veg		1								1	0.33						<b>0.33</b>
Roberts L.	E10	6-Sep 12:20	441119 7559630	20	86	gr/co/bo	shoreline	1	veg										1	<b>0.26</b>						<b>0.26</b>
<b>Total</b>				<b>925</b>	<b>3623</b>						<b>1</b>	<b>1</b>					<b>11</b>	<b>13</b>	<b>0.03</b>	<b>0.03</b>				<b>0.30</b>	<b>0.36</b>	

<sup>a</sup> si = silt; sa = sand; gr = gravel; co = cobble; bo = boulder

<sup>b</sup> veg = vegetation; bo = boulder; turb = turbulence

<sup>c</sup> see Table 5.1 for explanation of fish species codes

Appendix D5. Backpack electrofishing sampling locations, effort, habitat, fish catches and catch-per-unit-effort (CPUE) in Doris North Project streams, 2003.

Waterbody / Site	Date	Time	D/S UTM (13W)		Effort		Substrate <sup>a</sup>	Habitat Type <sup>b</sup>	Max. Depth (m)	Cover <sup>c</sup>	Number of Fish Captured <sup>d</sup>							CPUE (Number of Fish / 100 s)									
			Easting	Northing	(m)	(s)					ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	
Pelvic Inflow	E01	6-Sep 17:00	441291	7549747	50	272	bo/si	R3/P2	1	veg							11	11							4.04	4.04	
					50	272												11							4.04	4.04	
Pelvic Outflow	E02	6-Sep 16:00	438886	7555987	60	609	bo/si	R3/F3	0.80	bo/veg								4	4						0.66	0.66	
Pelvic Outflow	E03	18-Aug 15:20	437000	7558200	375	689	si	F2	1.5	veg								9	9						1.31	1.31	
Pelvic Outflow	E03	30-Aug 12:30	437000	7558200	1000	1723	si	F2	1.5	veg	1	5	6					25		0.06	0.29	0.35		0.75		1.45	
Pelvic Outflow	E04a	1-Sep 15:00	436517	7559094	250	1122	si/gr	F3	1	veg	4	1						5	5	0.36	0.09					0.45	
Pelvic Outflow	E04b	11-Aug 18:00	436497	7559150	40	221	co/bo	RF/BG	0.30	bo	8	3						11		3.62	1.36	16.13				4.98	
Pelvic Outflow	E04b	1-Sep 15:20	436501	7559153	4	31	co/bo	RF/BG	0.30	bo		5						5							16.13		
Pelvic Outflow	E04c	11-Aug 16:30	436381	7559380	50	333	si/gr	F2	1.20	veg								16	16						3.30	3.30	
Pelvic Outflow	E04c	1-Sep 15:40	436387	7559395	200	485	si/gr	F2/P2	1.2	veg																	
Pelvic Outflow	E05	1-Sep 16:00	436250	7559670	50	134	si	F3	0.40	veg																	
Pelvic Outflow	E06	20-Aug 17:00	435851	7560809	50	339	si	F3	0.75	veg								2	2						0.59	0.59	
Pelvic Outflow	E06	1-Sep 16:20	435843	7560862	75	173	si	F3	0.75	veg		1		2				3		0.58		1.16				1.73	
					2154	5859					13	15	6	2	13	31	80	0.22	0.26	0.10	0.03	0.22		0.53	1.37		
Roberts Lake Trib.	E07	6-Sep 15:00	438534	7561328	3	11	bo	R3	0.25	bo								6									
Roberts Lake Trib.	E09a	6-Sep 12:30	441119	7559630	30	321	bo/co	R3/P3	0.40	bo		6							1.87							1.87	
Roberts Lake Trib.	E09b	6-Sep 13:00	441079	7559546	30	192	si	P2	1.50	veg																	
Roberts Lake Trib.	E11	6-Sep 13:30	441263	7559504	20	183	bo/co	P3	0.30	bo	1							1		0.55						0.55	
Roberts Lake Trib.	E12	6-Sep 13:45	441363	7559482	40	39	si	R3	0.15																		
Roberts Lake Trib.	E13	6-Sep 14:15	438811	7561781	70	201	bo	RF/BG	0.30	bo								5	37	7.21	0.48						
Roberts Lake Trib.	E14a	2-Sep 13:30	436820	7563103	55	416	si/gr	R3	0.50	veg	30	2													1.20	8.89	
Roberts Lake Trib.	E14a	6-Sep 16:45	436820	7563103	10	42	si/gr	R3	0.50	veg	3								3	7.14						7.14	
Roberts Lake Trib.	E14b	5-Sep 16:40	436863	7563227	10	49	bo	R3	0.50	bo																	
Roberts Lake Trib.	E14c	5-Sep 16:35	436855	7563313	30	185	bo	R3	1.50	veg								11	11						5.95	5.95	
Roberts Lake Trib.	E14d	5-Sep 16:30	436850	7563350	60	128	si/bo	pond	0.50	veg								1	1						0.78	0.78	
Roberts Lake Trib.	E15	6-Sep 9:45	435503	7562956	150	381	bo/co	R3/P3	0.25	bo																	
					508	2148					34	8						17	59	1.58	0.37				0.79	2.75	

Appendix D5. Backpack electrofishing sampling locations, effort, habitat, fish catches and catch-per-unit-effort (CPUE) in Doris North Project streams, 2003.

Waterbody / Site	Date	Time	D/S UTM (13W)		Effort		Substrate <sup>a</sup>	Habitat Type <sup>b</sup>	Max. Depth (m)	Cover <sup>c</sup>	Number of Fish Captured <sup>d</sup>							CPUE (Number of Fish / 100 s)									
			Easting	Northing	(m)	(s)					ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	ARCH	LKTR	LKWH	CISC	LSCS	FRSC	NNST	Total	
Roberts Outflow	E16a	10-Aug 10:00	435250	7562600	35	559	bo/co	RF/BG	0.30	bo	10							10	1.79								
Roberts Outflow	E16a	8-Sep 13:00	435250	7562600	35	273	bo/co	RF/BG	1.30	bo	25	1						8	34	9.16	0.37				2.93		
Roberts Outflow	E16b	7-Aug 10:00	435171	7562648	50	466	gr/bo/si	R3	1	veg	2	1							3	0.43	0.21					0.64	
Roberts Outflow	E16b	8-Sep 13:45	435171	7562648	50	178	gr/bo/si	R3	1	veg	11								11	6.18							6.18
<b>Subtotal</b>					<b>170</b>	<b>1476</b>					<b>48</b>	<b>2</b>						<b>8</b>	<b>58</b>	<b>3.25</b>	<b>0.14</b>				<b>0.54</b>	<b>3.93</b>	
L. Roberts Outflow	E17	19-Aug 14:40	434123	7563022	400	600	bo/co	RA/BG	1	turb									1	1						0.17	0.17
L. Roberts Outflow	E18	15-Aug 15:30	433804	7563446	200	1181	bo/si	R3/BG	1.2	bo	1							1	10	12	0.08				0.08	0.85	1.02
<b>Subtotal</b>					<b>600</b>	<b>1781</b>					<b>1</b>							<b>1</b>	<b>11</b>	<b>13</b>	<b>0.06</b>				<b>0.06</b>	<b>0.62</b>	<b>0.73</b>
Tail Outflow	E24	6-Aug 20:00	434200	7558950	50	113	si	R3	1.2	veg									10	10						8.85	8.85
					<b>50</b>	<b>113</b>													<b>10</b>	<b>10</b>						<b>8.85</b>	<b>8.85</b>
Doris Outflow	E25	6-Aug 19:00	434145	7559550	200	1040	si/co	R2/RF	1.50	bo/veg		5	5						4	9		0.48				0.38	0.87
Doris Outflow	E26	20-Aug 15:11	434189	7559631	100	500	si	R2	>1.5	veg	5	6						1	12	1.00	1.20					0.20	2.40
Doris Outflow	E27	20-Aug 12:30	434741	7562352	300	586	si	R2	>1.5	veg		1						6	7		0.17				1.02	1.19	
<b>Subtotal</b>					<b>600</b>	<b>2126</b>					<b>5</b>	<b>12</b>						<b>11</b>	<b>28</b>	<b>0.24</b>	<b>0.56</b>				<b>0.52</b>	<b>1.32</b>	
Windy Outflow	E28	5-Sep 19:30	431355	7555928	250	1048	si	R3/P3	1.20	veg								5	5						0.48	0.48	
Windy Outflow	E29	6-Sep 19:15	429928	7557547	200	693	si	R3	1.40	veg									5	5							0.29
<b>Subtotal</b>					<b>450</b>	<b>1741</b>												<b>5</b>	<b>5</b>						<b>0.29</b>	<b>0.29</b>	
Glenn Outflow	E30	19-Aug 16:30	430839	7562517	300	743	si	R3/RF/BG				1							1			0.13					0.13
Glenn Outflow	E30	30-Aug 16:41	430839	7562517	300	639	si	R3/RF/BG			8	6							14	1.25	0.94						2.19
<b>Subtotal</b>					<b>600</b>	<b>1382</b>					<b>8</b>	<b>7</b>						<b>15</b>	<b>0.58</b>	<b>0.51</b>						<b>1.09</b>	
<b>Total</b>					<b>5132</b>	<b>16626</b>					<b>109</b>	<b>44</b>	<b>6</b>	<b>2</b>	<b>13</b>	<b>1</b>	<b>93</b>	<b>268</b>	<b>0.66</b>	<b>0.26</b>	<b>0.04</b>	<b>0.01</b>	<b>0.08</b>	<b>0.01</b>	<b>0.56</b>	<b>1.61</b>	

<sup>a</sup> si = silt; sa = sand; gr = gravel; co = cobble; bo = boulder

<sup>b</sup> R3 = shallow run; RF = riffle; BG = boulder garden; RA = rapid; pond = lake habitat within stream drainage; shoreline

<sup>c</sup> veg = vegetation; bo = boulder; turb = turbulence

<sup>d</sup> see Table 5.1 for explanation of fish species codes

Appendix D6. Beach seine sampling locations, effort, habitat, fish catches and catch-per-unit-effort (CPUE) in the Doris North Project area, 2003.

Waterbody	Site No.	UTM (11V) NAD27 Easting Northing	Date	Time	Effort (m <sup>2</sup> )	Substrate <sup>2</sup>	Max. Depth (m)	Number of Fish Captured <sup>5</sup>					CPUE (Number of Fish / 100 m <sup>2</sup> )						
								ARCH	LKTR	LKWH	CISC	FRSC	Total	ARCH	LKTR	LKWH	CISC	FRSC	
Roberts Bay	B1	433800 7564100	9-Aug	16:00	250	si	0.4												
Roberts Bay	B2	433825 7564075	9-Aug	16:15	120	sa/co	0.8						8	8				6.67	
Roberts Outflow	B3	435250 7562600	7-Aug	14:00	600	sa/bo	1.0	4	4					8	0.67	0.67		1.33	
Roberts Lake	B4	435527 7562515	20-Aug	11:30	540	sa/si/gr	1.0												
Roberts Lake	B5	435245 7562410	20-Aug	11:00	360	sa/co	0.6												
Doris Lake	B6	434776 7555478	23-Aug	15:00	540	sa/co	0.7			1	1			2			0.19	0.19	
<b>Total</b>					<b>2410</b>			<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>18</b>	<b>0.17</b>	<b>0.17</b>	<b>0.04</b>	<b>0.04</b>	<b>0.33</b>	<b>0.75</b>

<sup>2</sup> si = silt; sa = sand; gr = gravel; co = cobble; bo = boulder

<sup>5</sup> see Table 5.1 for explanation of fish species codes

Appendix D7. Length, weight, and condition factor statistics for fish captured in Doris North Project area, 2003.

Waterbody	Species	Fork Length (mm)					Weight (g)					Condition Factor				
		n	Mean	SD	Min	Max	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max
Roberts Outflow	Arctic char	475	479	253	53	893	441	2413	2254	5	7780	441	1.10	0.13	0.68	1.47
	Lake trout	43	452	123	94	787	42	1216	917	30	4620	42	1.10	0.15	0.75	1.39
	Broad whitefish	2	409	145	306	511	2	1258	1276	355	2160	2	1.43	0.27	1.24	1.62
	Cisco	3	264	88	190	362	3	272	280	65	590	3	1.12	0.15	0.95	1.24
	Least cisco	8	210	18	192	238	8	100	29	70	145	8	1.05	0.04	0.97	1.08
	Ninespine stickleback	8	33	5	25	40	-	-	-	-	-	-	-	-	-	-
Roberts Lake	Arctic char	5	133	28	90	165	-	-	-	-	-	-	-	-	-	-
	Lake trout	2	415	311	195	635	1	1955	-	-	-	1	0.76	-	-	-
	Ninespine stickleback	1	50	-	-	-	-	-	-	-	-	-	-	-	-	-
Little Roberts Lake	Arctic char	7	136	53	94	248	3	78	79	30	170	3	1.09	0.12	0.96	1.20
	Lake trout	6	276	138	104	445	3	453	346	120	810	3	0.95	0.04	0.91	0.99
	Cisco	1	192	-	-	-	1	70	-	-	-	1	0.99	-	-	-
	Least cisco	3	135	12	121	143	1	25	-	-	-	1	0.85	-	-	-
	Ninespine stickleback	20	63	6.3	51	74	-	-	-	-	-	-	-	-	-	-
Little Roberts Outflow	Arctic char	1	126	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fourhorn sculpin	1	95	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ninespine stickleback	11	53	11	30	66	-	-	-	-	-	-	-	-	-	-
Roberts Bay	Arctic char	25	514	211	179	838	23	2278	1818	45	6210	23	1.07	0.13	0.78	1.28
	Lake trout	14	572	170	318	908	14	2540	2195	265	7730	14	1.07	0.13	0.82	1.22
	Cisco	7	381	134	87	473	6	1049	305	625	1500	6	1.29	0.15	1.12	1.51
	Least cisco	2	141	88	78	203	-	-	-	-	-	-	-	-	-	-
	Arctic flounder	111	199	43	69	342	76	143	105	15	805	76	1.40	0.16	0.94	2.01
	Saffron cod	1543	167	71	40	475	98	379	209	25	965	98	0.77	0.10	0.56	1.05
	Greenland cod	3	536	48	491	586	3	1742	579	1240	2375	3	1.10	0.07	1.05	1.18
	Capelin	78	139	10	118	158	-	-	-	-	-	-	-	-	-	-
	Pacific herring	5	260	42	191	295	5	204	94	70	295	5	1.07	0.10	0.93	1.17
	Fourhorn sculpin	22	142	128	27	370	8	283	214	10	585	8	0.94	0.22	0.61	1.30
	Longhead dab	1	335	-	-	-	1	575	-	-	-	1	1.53	-	-	-
Doris Lake	Lake trout	5	500	160	276	725	5	1552	1373	170	3850	5	0.96	0.11	0.81	1.09
	Lake whitefish	5	260	143	75	429	4	479	403	110	835	4	1.36	0.25	1.06	1.57
	Cisco	1	129	-	-	-	1	20	-	-	-	1	0.93	-	-	-
	Least cisco	1	89	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ninespine stickleback	16	47	22	20	89	-	-	-	-	-	-	-	-	-	-
Doris Outflow	Arctic char	5	195	69	107	266	5	127	108	15	270	5	1.27	0.12	1.12	1.43
	Lake trout	12	410	160	38	692	6	1177	1185	490	3570	6	1.27	0.28	0.91	1.68
	Ninespine stickleback	11	51	19	20	76	-	-	-	-	-	-	-	-	-	-
Tail Outflow	Ninespine stickleback	10	61	10	44	81	-	-	-	-	-	-	-	-	-	-
Pelvic Inflow	Ninespine stickleback	11	24	3	20	27	-	-	-	-	-	-	-	-	-	-
Pelvic Outflow	Arctic char	13	167	38	124	250	13	51	33	15	110	13	0.98	0.13	0.70	1.20
	Lake trout	15	420	81	298	642	14	869	507	290	2350	14	1.03	0.08	0.89	1.18
	Lake whitefish	6	330	66	223	410	6	419	196	130	740	6	1.12	0.22	0.69	1.28
	Cisco	2	253	10	246	260	2	163	4	160	165	2	1.01	0.14	0.91	1.11
	Least cisco	13	206	19	161	240	13	85	27	30	145	13	0.95	0.17	0.61	1.18
	Ninespine stickleback	31	30	15	10	59	-	-	-	-	-	-	-	-	-	-
Roberts Lake Trib.	Arctic char	34	82	15	48	119	-	-	-	-	-	-	-	-	-	-
	Lake trout	8	95	22	64	128	-	-	-	-	-	-	-	-	-	-
	Ninespine stickleback	17	55	8	36	67	-	-	-	-	-	-	-	-	-	-
Glenn Outflow	Arctic char	8	227	35	183	295	8	146	82	75	335	8	1.17	0.10	1.01	1.30
	Lake trout	7	283	113	181	515	7	333	432	50	1265	7	1.01	0.15	0.84	1.25

Appendix D8. Frequency of occurrence and percent composition of food items encountered in fish stomachs in the Doris North Project area, 2003.

Food Item	Roberts Lake		Roberts Outflow		L. Roberts Lake		Roberts Bay								Doris Lake		
	Arctic char	%occ	Arctic char	%occ	Least cisco	%occ	Arctic char	%occ	Cisco	%occ	Saffron cod	%occ	Greenland cod	%occ	Pacific herring	%occ	Lake whitefish
<b>Invertebrates</b>																	
Isopoda ( <i>Saduria entemon</i> )											100.0	100.0				100.0	16.7
Chironomidae (blood worms)		20.0	92.8								33.3	100.0				100.0	83.3
Amphipoda																	
Unidentified invertebrate remains															100.0	100.0	
<b>Fish</b>																	
Capelin																	
Fish row		50.0	7.2				80.0	94.4									
Unidentified fish remains							20.0	5.6									
Number of Stomachs Examined	1	5		1	5		3		1	1	1		1		1	1	
Number of Empty Stomachs	1	3		1	0		2		0	1	0		0		0	0	
Total Fullness	0	140		0	270		10		10	0	100		0		30		
<b>Mean Fullness (%)</b>	<b>0.0</b>	<b>28.0</b>		<b>0.0</b>	<b>54.0</b>		<b>3.3</b>		<b>10.0</b>	<b>0.0</b>	<b>100.0</b>		<b>0.0</b>		<b>100.0</b>		<b>30.0</b>
Empty Stomachs (%)	100.0	60.0		100.0	0.0		66.7		0.0	100.0	0.0		0.0		0.0		0.0

**NOTES:**

% occ = frequency of occurrence of each food item in the total number of stomachs examined

% con = percent contribution of each food item (by volume) to the total amount of food found in all stomachs

Fullness was assessed on a scale of 0 (empty stomach) to 100 (stomach completely filled with food)

Total Fullness = the sum of all fullness values from all fish examined

Mean Fullness = Total Fullness / Number of Stomachs Examined

Appendix D9. Fish catch and catch-per-unit-effort (CPUE) at the upstream fish fence trap installed in Roberts Outflow, 2003.

Trap Check		Water Temp. (°C)	Staff Gauge <sup>a</sup> (cm)	Sampling Duration (h)	Number Captured and CPUE (fish / 24 h)													
					Arctic char			Lake trout			Broad whitefish			Least Cisco			All Species	
Date	Time	n	recap <sup>b</sup>	CPUE	n	recap <sup>b</sup>	CPUE	n	recap <sup>b</sup>	CPUE	n	recap <sup>b</sup>	CPUE	n	CPUE	n	CPUE	
6-Aug	16:00	9.5																
7-Aug	11:00	10	20.5	19.0	4		5.1	1	1	1.3	1		1.3			6	7.6	
8-Aug	9:30	10	19.8	22.5														
9-Aug	11:00	8.5	18.3	25.5														
10-Aug	11:20	9	18.2	24.3	5		4.9									5	4.9	
11-Aug	10:20	9	18	23.0	2		2.1									2	2.1	
12-Aug	13:35	9	18	27.2	66	7	58.1	2		1.8						68	59.9	
13-Aug	12:30	9	18	22.9	10		10.5	2		2.1						12	12.6	
14-Aug	10:00	8	22	21.5	4		4.5									4	4.5	
14-Aug	13:30	9	22.5	3.5	1		6.9	2			13.7					3	20.6	
15-Aug	11:00	9	23.5	21.5	7		7.8	1		1.1						8	8.9	
15-Aug	13:00	9	24	2.0	2	1	24.0	2	2	24.0						4	48.0	
16-Aug	11:35	9.5	26	22.6	21	1	22.3	2		2.1	1		1.1			24	25.5	
17-Aug	19:30	9	27	31.9	12		9.0									12	9.0	
18-Aug	12:37	8.5	28	17.1	5		7.0	2		2.8						7	9.8	
19-Aug	10:44	9	29.5	22.1	9	2	9.8	1		1.1						10	10.9	
20-Aug	9:10	8.5	30	22.4	17		18.2	2		2.1						19	20.3	
21-Aug	9:25	8.6	30	24.2	12	2	11.9	3		3.0				1	1.0	16	15.8	
22-Aug	9:20	7.7	31	23.9	7	1	7.0									7	7.0	
23-Aug	9:40	8.7	31	24.3	7		6.9	1	1	1.0						8	7.9	
24-Aug	11:14	7.8	34	25.6	17	1	16.0	1		0.9						18	16.9	
25-Aug	9:40	7.7	29	22.4	13		13.9	2		2.1						15	16.0	
26-Aug	10:21	8.7	28.5	24.7	9		8.8									9	8.8	
27-Aug	9:51	9	28	23.5	3		3.1	1		1.0						4	4.1	
28-Aug	9:40	8.9	27.5	23.8	11		11.1									11	11.1	
29-Aug	9:35	9	26.7	23.9	6		6.0									6	6.0	
30-Aug	9:41	9.5	26.4	24.1	4		4.0	1	1	1.0						5	5.0	
31-Aug	9:07	9.5	25.5	23.4	6		6.1									6	6.1	
1-Sep	9:50	9.5	25.5	24.7	4		3.9									4	3.9	
2-Sep	10:15	10	24.7	24.4	4		3.9									4	3.9	
3-Sep	15:05	10	24.5	28.8	3		2.5									3	2.5	
4-Sep	19:20	9.5	26.7	28.3	7	1	5.9	2	1	1.7						9	7.6	
5-Sep	14:00	10	27	18.7	5		6.4									5	6.4	
6-Sep	10:50	9.5	27	20.8														
7-Sep	9:40	9.5	26.6	22.8	3		3.2									3	3.2	
8-Sep	14:15	8.5	28.2	28.6	3		2.5	1	1	0.8						4	3.4	
<b>Total</b>				<b>790.3</b>	<b>289</b>	<b>16</b>	<b>8.8</b>	<b>29</b>	<b>7</b>	<b>0.9</b>	<b>2</b>	<b>0</b>	<b>0.1</b>	<b>1</b>	<b>0.0</b>	<b>0.03</b>	<b>321</b>	<b>9.7</b>

<sup>a</sup> staff gauge located in Roberts Outflow immediately downstream of the fish fence

<sup>b</sup> recaptures are of fish tagged during 2002 survey, with the exception of one LKTR trapped 15 Aug (Originally tagged in year 2000) and two LKTR trapped 30 Aug and 8 Sep (tagged in Little Roberts Lake and Doris Outflow respectively, in 2003).

**Note:** Six Arctic char and four lake trout were captured immediately upstream of fence with beach seine or backpack electrofisher in addition to fish trapped on 7 Aug. See Appendix Tables D5 and D6.

Appendix D10. Fish catch and catch-per-unit-effort (CPUE) at the upstream fyke net trap installed in Roberts Outflow, 2003.

Trap Check		Water Temp. (°C)	Staff Gauge <sup>a</sup> (cm)	Sampling Duration (h)	Number Captured and CPUE (fish / 24 h)																
					Arctic char			Lake trout			Broad whitefish			Lake Cisco			Least Cisco				
Date	Time	n	recap	CPUE	n	recap	CPUE	n	recap	CPUE	n	recap	CPUE	n	recap	CPUE	n	CPUE			
7-Aug	11:30	9.5	20.5																		
8-Aug	11:00	9.5	19.8	23.5	3		3.1	1		1.0							4	4.1			
9-Aug	11:20	8.5	18.3	24.3																	
10-Aug	10:30	8.5	18.2	23.2				2		2.1							2	2.1			
11-Aug	11:00	9.0	18.0	24.5	2	2	2.0	3	2	2.9							5	4.9			
12-Aug	19:00	9.0	18.0	32.0	6	2	4.5										6	4.5			
13-Aug	10:00	9.0	18.0	15.0	31	31	49.6										31	49.6			
14-Aug	11:00	9.0	22.0	25.0	14	14	13.4	3	3	2.9							17	16.3			
15-Aug	10:20	9.0	23.5	23.3	6	6	6.2	2	2	2.1							8	8.2			
16-Aug	11:00	9.5	26.0	24.7	7	7	6.8	2	2	1.9							9	8.8			
17-Aug	19:00	9.0	27.0	32.0	28	28	21.0	4	4	3.0	1	1	0.8				33	24.8			
18-Aug	11:11	8.5	28.0	16.2	4	4	5.9										4	5.9			
19-Aug	9:00	9.0	29.5	21.8	15	14	16.5										15	16.5			
20-Aug	8:51	9.0	30.0	23.9	12	10	12.1	1	1	1.0							13	13.1			
21-Aug	9:00	8.6	30.0	24.1	15	15	14.9										15	14.9			
22-Aug	8:50	7.7	31.0	23.8	11	11	11.1	6	6	6.0							17	17.1			
23-Aug	9:08	8.0	31.0	24.3	10	8	9.9										10	9.9			
24-Aug	10:49	8.1	34.0	25.7	6	6	5.6	2	2	1.9							8	7.5			
25-Aug	9:10	7.6	29.0	22.4	10	10	10.7	3	2	3.2							13	14.0			
26-Aug	10:06	8.6	28.5	24.9	2	2	1.9	1	1	1.0							3	2.9			
27-Aug	9:08	9.0	28.0	23.0	10	5	10.4									2	2.1	12	12.5		
28-Aug	9:10	9.3	27.5	24.0	7	2	7.0	1	1	1.0							8	8.0			
29-Aug	9:12	8.6	26.7	24.0	20	10	20.0										20	20.0			
30-Aug	9:13	8.9	26.4	24.0	11	4	11.0									4	4.0	15	15.0		
31-Aug	8:53	8.9	25.5	23.7	10	4	10.1	1	1	1.0							11	11.2			
1-Sep	9:30	9.5	25.5	24.6	15	6	14.6	1	1	1.0							16	15.6			
2-Sep	9:30	9.5	24.7	24.0	25	2	25.0										25	25.0			
3-Sep	14:20	10.0	24.5	28.8	9	4	7.5	1	1	0.8					2	1.7		12	10.0		
4-Sep	19:10	9.5	26.7	28.8	7	1	5.8											7	5.8		
5-Sep	13:30	10.0	27.0	18.3	16	5	20.9	1	1	1.3							17	22.3			
6-Sep	9:30	9.5	27.0	20.0	22	4	26.4										22	26.4			
7-Sep	9:20	9.5	26.6	23.8	8	1	8.1										8	8.1			
8-Sep	12:00	8.5	28.2	26.7	16	3	14.4										16	14.4			
Total				768.5	358	221	11.2	35	30	1.1	1	1	0.0	2	0	0.1	6	0	0.19	402	12.6

<sup>a</sup> staff gauge located at fish fence. Reported measurements were collected during fish fence trap checks.

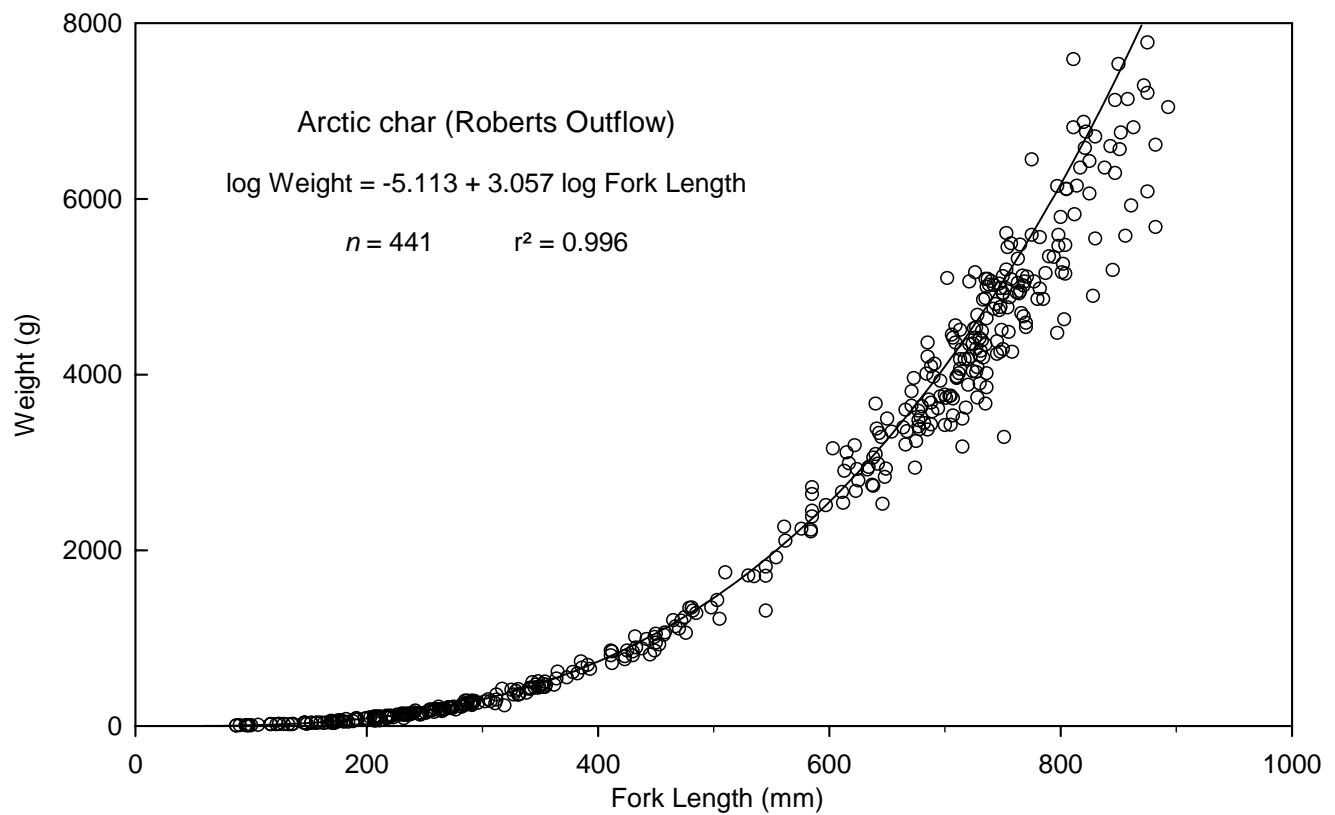


Figure D11. Length-weight relationship for Arctic char captured in Roberts Outflow, 2003.

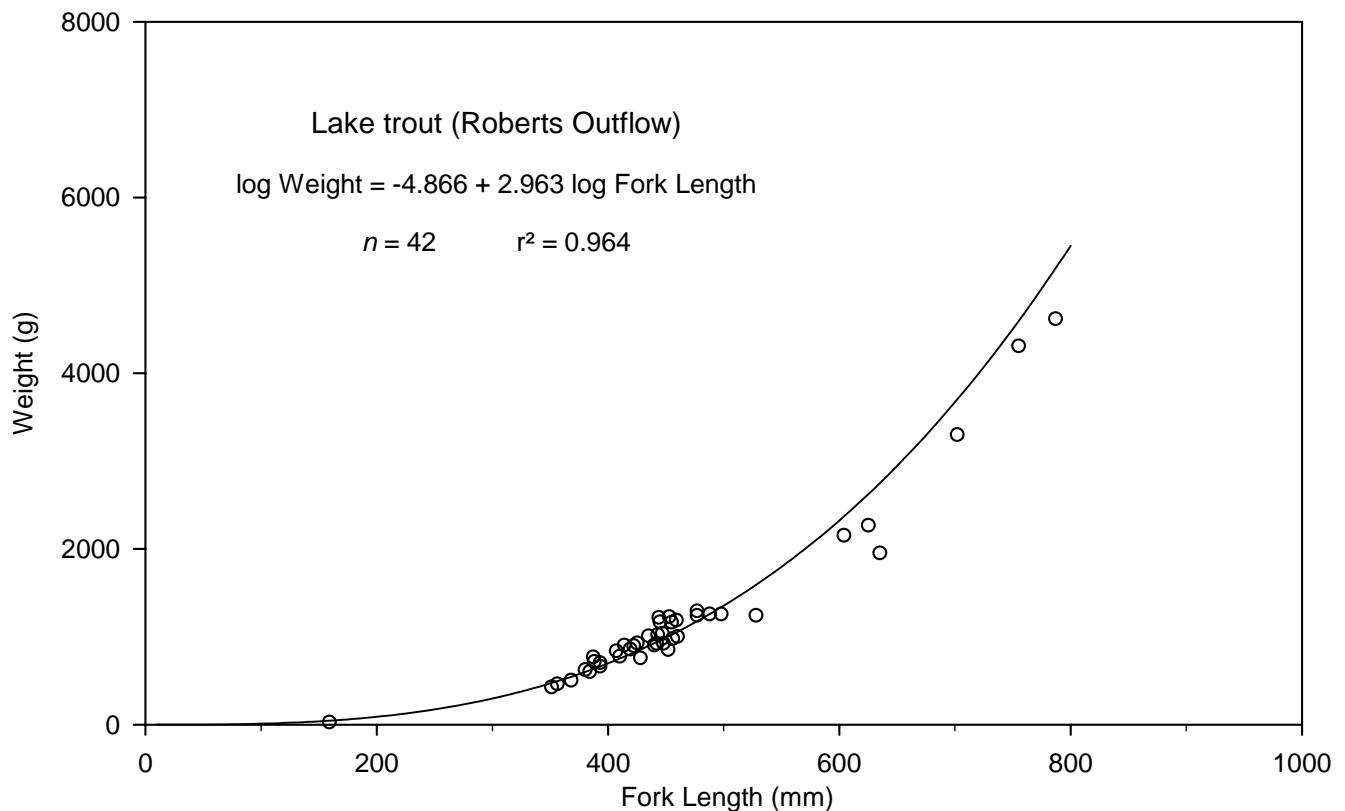


Figure D12. Length-weight relationship for lake trout captured in Roberts Outflow, 2003.

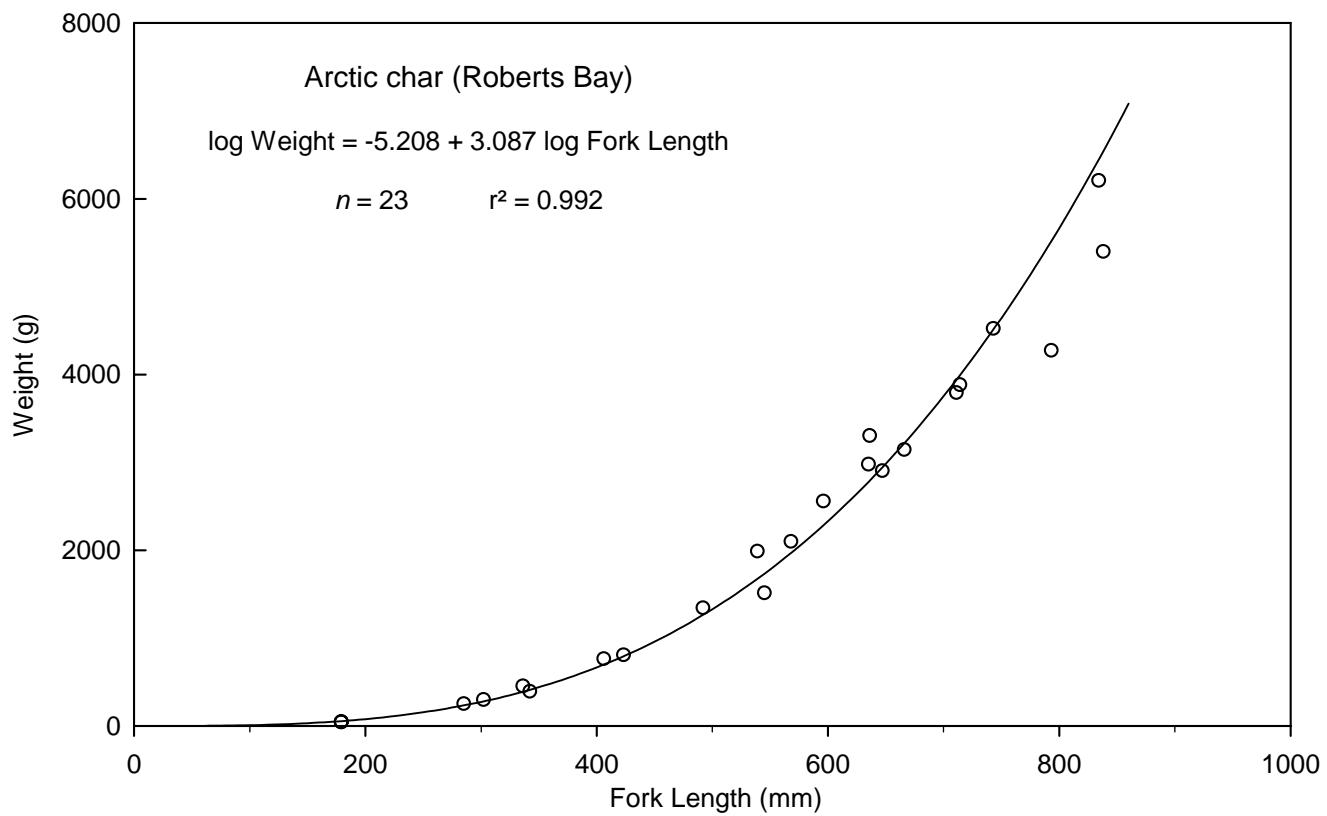


Figure D13. Length-weight relationship for Arctic char captured in Roberts Bay, 2003.

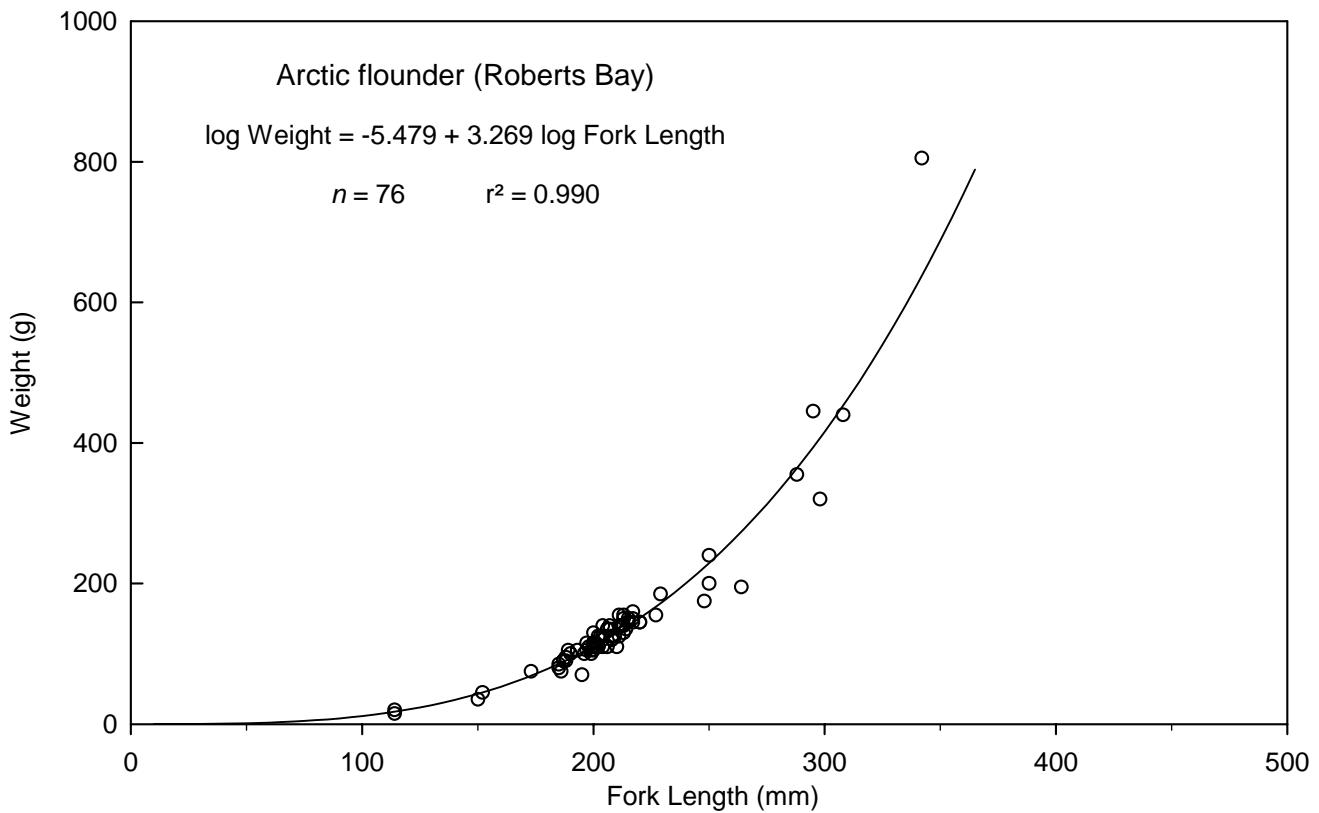


Figure D14. Length-weight relationship for Arctic flounder captured in Roberts Bay, 2003.

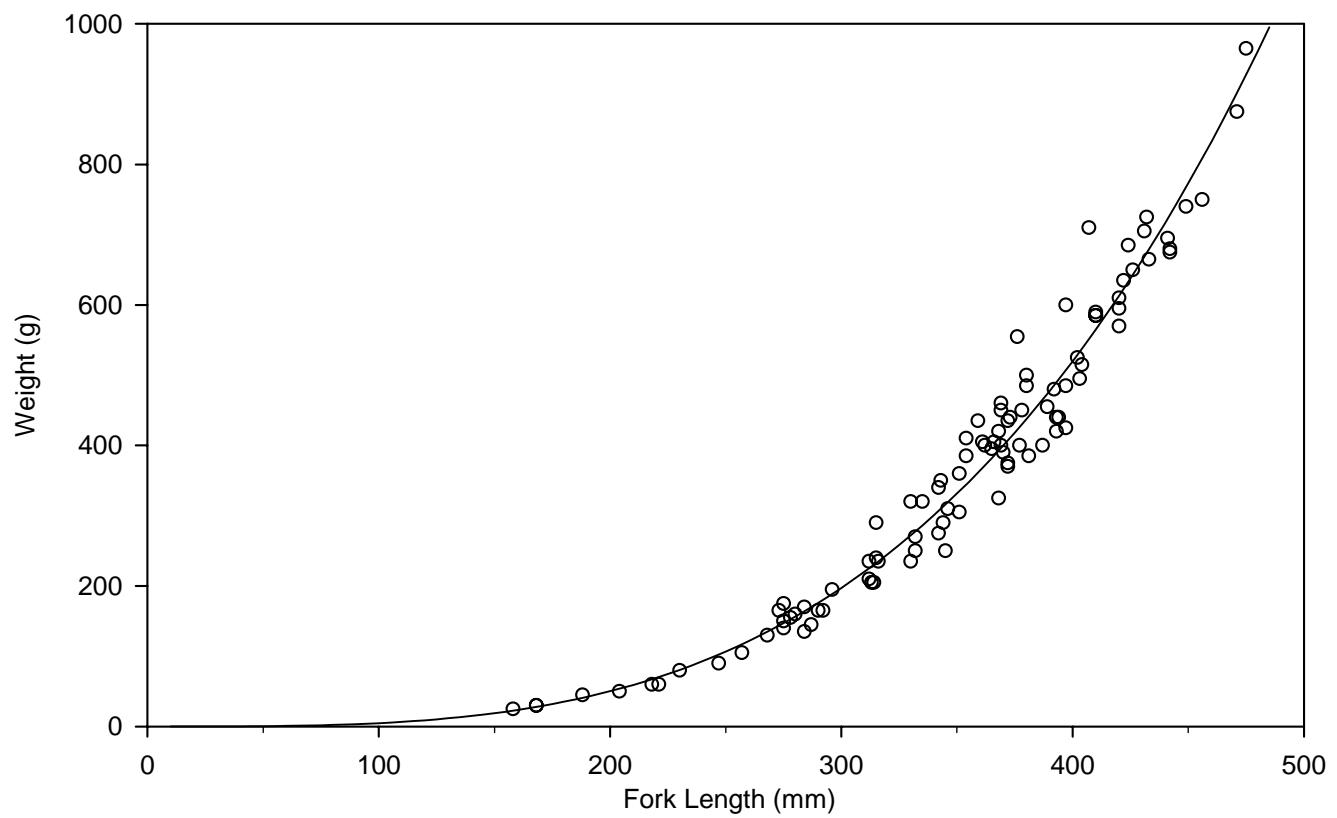


Figure D15. Length-weight relationship for saffron cod captured in Roberts Bay, 2003.